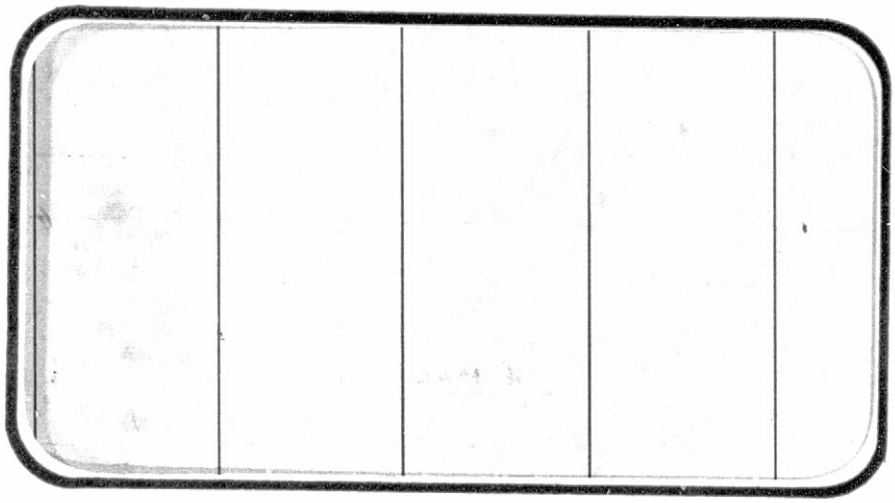
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR-
141827



SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

November, 1975

DMS-DR-2165
NASA CR-141,827

VOLUME 5 OF 5

RESULTS OF AN INVESTIGATION OF THE 0.003-SCALE SPACE SHUTTLE EXTERNAL TANK MSFC MODEL 460 IN THE NASA/MSFC 14 X 14-INCH TRISONIC WIND TUNNEL TO DETERMINE STATIC PRESSURE DISTRIBUTIONS DURING REENTRY (TA2F)

by

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Prepared under NASA Contract Number NAS9-13247

by

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	MSFC TWT 596
NASA Series Number:	TA2F
Model Number:	460
Test Dates:	July 20-23, 1974
Occupancy Hours:	104

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ABSTRACT

Objective of the test was to obtain static pressure distributions for the ET at reentry conditions. Basic configuration of the model was the MCR 0200 ET modified to include a rectangular crossbar at the aft ET/orbiter attach point. Mach numbers were 1.96, 3.48, and 4.96. Reynolds number per foot at these Mach numbers were 6.95 million, 6.42 million, and 4.95 million, respectively. Angle of attack range was -8 to 100 degrees and roll angle was 0 to 315 degrees. Occupancy hours were 104.

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D) DCYM/D(X/LB) vs. X/LB

E) CNM vs. ALPHA
CLMM
CYM
CYNM

NOMENCLATURE

Symbol	Plot Symbol	Definition	Units
a		speed of sound	m/sec, ft/sec
A_b		base area; cross-sectional area of the cylindrical ET	$in.^2$
b_{ref}	BREF	reference span; diameter of the cylindrical section of the model	in.
ET		external tank	
FA		axial force (AF), positive in the negative direction of x_m	lb
F_N		normal force (NF), positive in the negative direction of z_m	lb
F_Y		side force (SF), positive in the positive direction of y_m	lb
ℓ_B	LBODY	length of the ET	in.
ℓ_{ref}	LREF	reference length; diameter of the cylindrical section of the model	in.
M	MACH	Mach number; V/a	
MRP	MRP	moment reference point located in the x_m, y_m, z_m axes by XMRP, YMRP, and ZMRP (See Data Reduction section)	
M_x		rolling moment (RM); a moment about the x_m axis (a positive rolling moment tends to rotate the positive y_m axis toward the positive z_m axis)	in.-lb
M_y		pitching moment (PM); a moment about the y_m axis (a positive pitching moment tends to rotate the positive z_m axis toward the positive x_m axis)	in.-lb
c g		center of gravity	

NOMENCLATURE (Continued)

Symbol	Plot Symbol	Definition	Units
M_Z		yawing moment (YM); a moment about the z_m axis (a positive yawing moment tends to rotate the positive x_m axis toward the positive y_m axis)	in.-lb
p_∞	P	pressure, freestream	psi
p_o	PO	stagnation pressure	psi
q_∞	Q(PSI)	free stream dynamic pressure	psi
S_{ref}	SREF	reference area; cross-sectional area of the cylindrical section of the model	$in.^2$
RN/L	RN/L	unit Reynolds number	per m, per ft
SRB		solid rocket booster	
V		velocity	m/sec, ft/sec
x_m, y_m, z_m		missile axis system (see Data Reduction section)	
X		distance from nose of ET model in the negative x_m direction	in.
X_T, Y_T, Z_T		model stations; (see figure 2a)	in.
X_{CP}/ℓ_B	XCP/L	longitudinal position of the center of pressure, expressed as a fraction of the ET length, measured from the ET nose $\frac{X_{CP}}{\ell_B} = \frac{XMRP}{\ell_B} - \frac{C_{m_m}}{C_{N_m}} \frac{\ell_{ref}}{\ell_B}$	
$\bar{c}$		aerodynamic chord	m,ft
COEFFICIENTS			
C_{A_m}	CA	axial force coefficient; $F_A/q\ S_{ref}$	

NOMENCLATURE (Continued)

Symbol	Plot Symbol	Definition	Units
$C_{A_{b_m}}$	CAB	base axial force coefficient; $(p_\infty - p_b) A_B/q\ S_{ref}$	
C_{A_f}	CAF	forebody axial force coefficient; $C_{A_m} - C_{A_{b_m}}$	
C_{ℓ_m}	CBL	rolling moment coefficient; $M_x/q\ S_{ref}\ b_{ref}$	
C_{m_m}	CLMM	pitching moment coefficient; $M_y/q\ S_{ref}\ \ell_{ref}$	
C_{N_m}	CNM	normal force coefficient; $F_N/q\ S_{ref}$	
C_{n_m}	CYNM	yawing moment coefficient; $M_z/q\ S_{ref}\ b_{ref}$	
C_p	CP	pressure coefficient; $(p- p_\infty)/q$	
C_{Y_m}	CYM	side force coefficient; $F_y/q\ S_{ref}$	
C_{N_m}'	DCN/DX	local normal force coefficient; $\partial C_N/\partial(X/D)$	
C_{Y_m}'	DCY/DX	local side force coefficient; $\partial C_Y/\partial(X/D)$	
SYMBOLS			
α	ALPHA	angle of attack	deg.
β	BETA	angle of sideslip	deg.
ϕ	PHI	angle of roll	deg.
ψ	PSI	angle of yaw	deg.

NOMENCLATURE (Concluded)

Symbol	Plot Symbol	Definition	Units
θ	THETA	circumferential location	deg.
ρ		mass density	kg/m^3, $slugs/ft^3$
ref		reference conditions	
∞		free stream conditions	
b		base	
c		cavity	
t		total conditions	
B		model body	
T		external tank	
m		missile axis system	
l		local	
s		static conditions	
	MOUNT	1.0 indicates tail mounted (T_1) 2.0 indicates side mounted (T_2)	

INTRODUCTION

After the solid rocket boosters and the external tank separate from the orbiter, the ET will reenter the earth's atmosphere at high supersonic or even hypersonic Mach numbers. This test is the second of two tests conducted in the NASA-MSFC 14-inch Trisonic Wind Tunnel to obtain force and pressure data on the 324-inch diameter ET at typical reentry angles of attack.

Model (MSFC No. 460) configuration is a 0.003-scale representation of the ET with fuel lines and forward and aft SRB and orbiter attach hardware. Also included is the ET/orbiter rectangular crossbar attach structure.

Pressure taps (192 total) were used to obtain data for evaluating the load distribution on the ET. Further evaluation of the ET aerodynamic characteristics can be made by comparing data from this test with data from TWT 583 (reference 4).

Pressure data were taken at three Mach numbers: 1.96, 3.48, and 4.96. Angle of attack range was -8 to 100 degrees, which was obtained by using two ET model mountings. Range -8 to 30 degrees used a tail-mounted model (T_1) for each of eight roll positions, 0 to 315 degrees. This model had attach structure and protuberances. For the range of 51 to 100 degrees, a side-mounted model (T_2) at 0° roll position was used.

MODEL DESCRIPTION

The model is a 0.003-scale of the MCR 0200 space shuttle ET configuration modified to include a crossbar at the aft orbiter/ET attach points. General arrangement of the model is shown in figure 2a. The model is designated MSFC #450, and it consists of two ET models (one tail-mounted and one side-mounted); protuberances simulating fuel lines, attachment hardware, etc.; and model adapters which allowed the tanks to be supported in the tunnel on RI stings #1 and #3. The models were built by NASA to conform to the configuration specified by Rockwell International drawing VL78-000041B (Reference Drawing 6) and Martin-Marietta memo SA-A-74-9 (Reference Report 2).

Both ET models were made of stainless steel and contained 192 pressure orifices each. From these orifices, stainless steel and annealed 0.032-inch OD tubing was routed out the base (or the side) of the model. Four feet of 0.050-inch OD tubing was brazed onto each of the 0.032-inch tubes as close to the exit cavity as possible.

When placed in the tunnel test section, the tubing bundle from the model was secured along the sting and routed down the sector through the tunnel floor. At this point, Tygon tubing was used to connect the steel tubing to quick disconnects, which were connected to the scanivalves. Installation photographs for the tail mounted (T_1) and side mounted (T_2) models are in figures 3a and 3b, respectively.

Model stations are sometimes used to describe locations of various components of the model. When used, these stations will be given in

inches model scale and the zero reference points will be same as in Rockwell International drawing VL72-000088"D" (Reference Drawing 2). Zero reference points are shown in figure 2a.

CONFIGURATIONS INVESTIGATED

Two ET configurations investigated are defined as follows:

T_1--MCR 0200 tail-mounted, modified to include crossbar configuration with protuberances.

T_2--MCR 0200 side-mounted, "clean" configuration (without protuberances).

Each of the configurations consists of the following model components:

T_1--T_{12} AT_5 AT_6 AT_7 AT_8 AT_9 PT_1 PT_2 PT_3 FL_1 FL_2 FR_6

T_2--T_{12}

Brief descriptions of each component are below. Refer to table III for dimensional data.

T_{12}	Baseline 324-inch diameter external oxygen-hydrogen tank
AT_5	Forward orbiter/ET attach structure
AT_6	Left rear orbiter/ET attach structure
AT_7	Right rear orbiter/ET attach structure
AT_8	Forward SRB/ET attach structure
AT_9	Aft SRB/ET attach structure
PT_1	LOX vent line fairing
PT_2	LOX feed line
PT_3	LH_2 feed line
FL_1	LOX feed line
FL_2	LH_2 feed line
FR_6	Aft ET/orbiter crossbar

TEST FACILITY DESCRIPTION

The Marshall Space Flight Center 14" x 14" Trisonic Wind Tunnel is an intermittent blowdown tunnel which operates by high pressure air flowing from storage to either vacuum or atmospheric conditions. A Mach number range from .2 to 5.85 is covered by utilizing two interchangeable test sections. The transonic section permits testing at Mach 0.20 through 2.50, and the supersonic section permits testing at Mach 2.74 through 5.85. Mach numbers between .2 and .9 are obtained by using a controllable diffuser. The range from .95 to 1.3 is achieved through the use of plenum suction and perforated walls. Mach numbers of 1.44, 1.93 and 2.50 are produced by interchangeable sets of fixed contour nozzle blocks. Above Mach 2.50 a set of fixed contour nozzle blocks is tilted and translated automatically to produce any desired Mach number in .25 increments.

Air is supplied to a 6000 cubic foot storage tank at approximately -40°F dew point and 500 psi. The compressor is a three-stage reciprocating unit driven by a 1500 hp motor.

The tunnel flow is established and controlled with a servo actuated gate valve. The controlled air flows through the valve diffuser into the stilling chamber and heat exchanger where the air temperature can be controlled from ambient to approximately 180°F. The air then passes through the test section which contains the nozzle blocks and test region.

Downstream of the test section is a hydraulically controlled pitch sector that provides a total angle of attack range of 20° ($\pm$10°). Sting offsets are available for obtaining various maximum angles of attack up to 95°.

TEST FACILITY DESCRIPTION (Concluded)

The diffuser section has movable floor and ceiling panels which are the primary means of controlling the subsonic Mach numbers and permit more efficient running supersonically. The sector assembly and supersonic diffuser telescope into the subsonic diffuser to allow easy access to the model and test section.

Tunnel flow is exhausted through an acoustically damped tower to atmosphere or into the vacuum field of 42,000 cubic feet. The vacuum tanks are evacuated by vacuum pumps driven by a motor of 500 hp.

Data are recorded by a solid-state digital data acquisition system. The digital data are transferred to punched cards during the run to be reduced later by a computer to proper coefficient form.

TEST PROCEDURE

First part of the test was conducted using a side-mounted, "clean" configuration (T_2 without protuberances). Since it was a "clean" configuration, the roll angle was considered to always be 0 degrees. Angle of attack range was from 51 to 100 degrees in increments of 3 degrees. Data were obtained at Mach numbers of 1.96, 3.48, and 4.96.

Second part of the test consisted of using a tail-mounted model with attach hardware, fuel lines, and electrical tunnel. Angle of attack range was from -8 to 30 degrees in increments of 4 degrees. Data were obtained at eight roll positions, 0 to 315 degrees in 45-degree increments. All orifices and tubing were checked for leakage at the beginning of the test and after each roll position change. A leak check after rolling the model insured that correct measurements were being received from the orifices. Response time for the scanivalve function was within the one-second intervals allowed each scanivalve.

List of average test conditions is in table I. Dataset run number collation summary is in table II.

DATA REDUCTION

Location of each pressure orifice and the numbering system are presented in tables IV and V. Also special identification of blocked or inoperative pressure orifices is made for both tail-mounted and side-mounted models in these tables. Locations of these orifices are shown in figure 2b.

Sting deflections were measured outside the tunnel by using check weights. Sting deflections versus load curve for the pressure test (TWT 596) was found to be the same, within allowable accuracy, as that of the force test (TWT 583). The same ET configuration and only slightly different support hardware were used in both force and pressure tests. Increments of α due to sting bending in the force test were added to the nominal α's for the pressure test. This gave reasonably accurate values of angle of attack, accuracy comparable to force test, when the pressure model was tested at the same Mach number and tunnel total pressure as the force model.

Pressure data were reduced to coefficient form and are tabulated along with wind tunnel parameters, configuration, and run number in the appendix. Plots are presented for both longitudinal and circumferential pressure distributions (C_p vs X/ℓ_B and C_p vs θ). These plots are shown for each Mach number, angle of attack, and roll position at which tests were conducted. In addition, the pressure coefficients were integrated to obtain the following missile axis force and moment coefficients:

$C_{N_m} = F_N/q\ S_{ref}$		normal force coefficient
$C_{Y_m} = F_Y/q\ S_{ref}$		side force coefficient
$C_{m_m} = M_Y/q\ S_{ref}\ \ell_{ref}$		pitching moment coefficient
$C_{n_m} = M_Z/q\ S_{ref}\ b_{ref}$		yawing moment coefficient
$C_{N_m}' = \partial C_N/\partial(X/D)$		local normal force coefficient
$C_{Y_m}' = \partial C_Y/\partial(X/D)$		local side force coefficient

Force and moment coefficients obtained from the integration of pressures are for comparison with the results from the force test.

Model reference dimensions used in the data reduction are presented in table VI. The axis system diagram is presented in figure 1. The missile axis system (x_m, y_m, z_m) is a non-rolling body axis system that is frequently used in wind tunnel tests and studies of missile flight dynamics. It is a system of axes that rotates with a missile or wind tunnel model through angles of sideslip and angles of attack but never through angles of roll; i.e., it never rotates about the missile or model longitudinal axis. The orientation of the missile axis coefficients is defined in figure 1. The missile axis system is identical with the body axis system at zero roll angle.

Moment reference point (MRP) for the 0.003-scale model is taken to be at the dry weight center of gravity of the ET. For the full-scale ET, the center of gravity is located at X_T = 1395.4 inches. Thus, the MRP for the 0.003-scale ET model is 3.259 inches from the model nose, on the centerline (figure 2a).

REFERENCES

1. NASA TMX-53185, "The George C. Marshall Space Flight Center's 14 x 14 Inch Trisonic Wind Tunnel Technical Handbook," Simon, Erwin; December 1964.

2. SA-A-74-9, "Space Shuttle External Tank Entry Force and Moment Wind Tunnel Test Requirements," Michna, D. J., Michoud Operations, Martin Marietta Corporation, February 1974.

3. NSI-M-9230-74-270, "A Pre-test Report for MSFC TWT 596, An Investigation to Determine the Static Pressure Distributions During Reentry of a 0.003-scale Modified MCR 200 Space Shuttle External Tank Model in the NASA-MSFC 14 x 14-Inch Trisonic Wind Tunnel," Robertson, M, K. and Winkler, G. W., April 1974.

4. DMS-DR-2145, NASA CR-134,420, "Static Stability Characteristics of the Space Shuttle External Tank (MSFC Model 458) During Reentry in the MSFC 14-inch TWT (TA1F)," by Ramsey, Paul E., Robertson, Michael K., and Winkler, Gary W. October 1974.

REFERENCE DRAWINGS

1. VL72-000106, 8-6-73; SRB to ET Aft Attach, Approved Link Concept, Shuttle Study; Rockwell International.

2. VL72-000088 "D", 8-3-73; Shuttle Configuration Control, MCR 0200 Baseline Rev. III, Dated 7-2-73; Rockwell International.

3. VL78-000031 "A", 6-29-73; Thermal Protection-External Tank MCR 0200 Baseline Dated 4-11-73; Rockwell International.

4. VL77-000051 "A", 9-10-73; SRB Single PT.-Fwd Thrust Fitting (MCR 0190 Rev. 3 Baseline 8-13-73); Rockwell International.

5. SS-A01176 (Wind Tunnel Model Group); Details - .015 Scale EOHT Attachments (140 A/B) (67-OTS) 11-20-73; Rockwell International.

6. VL78-000041 "B", 5-30-73; External Tank Configuration Control MCR 0200 Revision 1 Dated 5-16-73; Rockwell International.

Table I.

TEST: MSFC TWT 596 DATE: Aug 1974

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per foot)	DYNAMIC PRESSURE (pounds/sq.inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)	STAGNATION PRESSURE (pounds/sq.inch)
1.96	6.95×10^6	10.2	104	28.0
3.48	6.42×10^6	6.9	143	60.0
4.96	4.95×10^6	3.1	143	90.0

BALANCE UTILIZED: None - Pressure Test; 50 PSIA Transducers

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF			
SF			
AF			
PM			
RM			
YM			

COMMENTS: Transducer capacity of 50 psia, accuracy of $\pm$.25 psi, and coefficient tolerance of $\pm$.025 @ q = 10 psi.

MSFC - Form 263-1 (Rev. April 1973)

TABLE II.

TEST: MSFC TWT 596 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: July 1974

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES OFF-SET	PARAMETERS/VALUES MT.	PARAMETERS/VALUES Φ	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.96	3.48	4.96	TEST RUN NUMBERS
RIA001	T, (TAIL MOUNTED	-8	0	0	TAIL	0	3	86	140	139	
002	E.T. WITH	-4					3	87	137	138	
003	PROTUBERANCES)	0					5	88	136	135	
004		4					3	89	133	134	
005		8		↓			5	90	132	131	
006		12		20			3	85	141	142	
007		16					3	84	144	143	
008		20					3	83	145	146	
009		24					3	82	148	147	
010		28		↓		↓	3	81	149	150	
011		-8		0		90	3	80	170	169	
012		-4					3	79	167	168	
013		0					3	78	166	165	
014		4					3	77	163	164	
015		8		↓			3	76	162	161	
016		12		20			3	75	159	160	
017		16					3	74	158	157	
RIA018	↓	20	↓	↓	↓	↓	3	73	155	156	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

C.P

α OR β SCHEDULES

COEFFICENTS

IDVAR (1) IDVAR (2) NDV

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TABLE II. (Continued)

TEST: MSFC TWT 596 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: July 1974

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES OFF-SET	PARAMETERS/VALUES MT.	PARAMETERS/VALUES Ø	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.96	3.48	4.96	TEST RUN NUMBERS
R1A 019	T$_i$ (TAIL-MOUNTED	24	0	20	TAIL	90	3	72	154	153	
020	ET WITH	28					3	71	151	152	
021	PROTUBERANCES)	-8		0		135	2		179	180	
022		-4					2		178	177	
023		0					2		175	176	
024		4					2		173	172	
025		8					2		174	171	
026		12		20			2		190	189	
027		16					2		187	188	
028		20					2		186	185	
029		24					2		183	184	
030		28					2		182	181	
031		-8		0		180	3	61	210	209	
032		-4					3	62	207	208	
033		0					3	63	206	205	
034		4					3	64	203	204	
035		8					3	65	202	201	
R1A 036		12		20			3	66	199	200	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CP COEFFICENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

MSFC - Form 263-2 (Rev. May 1973)

TABLE II. (Continued)

TEST: MSFC TWT 596 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: July 1974

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES OFF-SET	PARAMETERS/VALUES NT.	PARAMETERS/VALUES Φ	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.96	3.48	4.96	TEST RUN NUMBERS
R1A 037	T. CTAIL-MOUNTED	16	0	20	TAIL	180	3	67	198	197	
038	E.T. WITH	20					3	68	195	196	
039	PROTUBERANCES	24					3	69	194	193	
040		28					3	70	191	192	
041		-8		0		225	2		255	126	
042		-4					2		254	127	
043		0					2		253	128	
044		4					2		252	129	
045		8					2		251	130	
046		12		20			2		260	121	
047		16					2		259	122	
048		20					2		258	123	
049		24					2		257	124	
050		28					2		256	125	
051		-8		0		270	3	96	101	102	
052		-4					3	97	104	103	
053		0					3	98	105	106	
R1A 054		4					3	99	108	107	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

C.P.

COEFFICENTS

α OR β SCHEDULES

IDVAR (1) IDVAR (2) NDV

MSFC - Form 363-2 (Rev. May 1973)

TABLE II. (Continued)

TEST: MSFC TWT 596 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: [illegible]

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES OFF-SET	PARAMETERS/VALUES φ	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.96	3.48	4.96	TEST RUN NUMBERS
R1A055	T, (TAIL-MOUNTED	8	0	TAIL	270	3	100	109	110	
056	ET WITH	12				3	95	120	119	
057	PROTUBERANCES)	16				3	94	117	118	
058		20				3	93	116	115	
059		24				3	92	113	114	
R1A060		28				3	91	112	111	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

C.P.

α OR β SCHEDULES — COEFFICENTS — IDVAR (1) — IDVAR (2) — NDV

MSFC - Form 263-3 (Rev. May 1973)

TABLE II. (Continued)

TEST: MSFC TWT 596 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: July 1974

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES OFF SET	PARAMETERS/VALUES MT.	PARAMETERS/VALUES ϕ	PARAMETERS/VALUES STING COMB	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.96	3.48	4.96	TEST RUN NUMBERS
R1A 061	T_2 (SIDE-MOUNTED	51	0	60	SIDE	0	C	3	60	1/1	2	
062	ET WITHOUT	54						3	59	4	3	
063	PROTUBERANCES)	57						3	58	5	6	
064		60						3	57	8	7	
065		63						3	56	9	10	
066		66						3	55	12	11	
067		69						3	54	13	14	
068		70		80			D	3	53	16/1	15	
069		72						3	52	17	18	
070		75						3	51	20	19	
071		78						3	50	21	22	
072		80		90			E	3	49	24	23	
073		82						3	48	25	26	
074		85						3	47	28	27	
075		88						3	46	29	30	
076		90						3	45	32	31	
077		92						3	44	33	34	
R1A 078		95						3	43	36	35	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CF: COEFFICENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES: α C: 50° → 70°; α D: 70° → 90°; α E: 50° → 100°

MSFC - Form 263-2 (Rev. May 1973)

TABLE II. (Continued)

TEST: MSFC TWT 596 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: July 1974

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES OFF SET	PARAMETERS/VALUES M.T.	PARAMETERS/VALUES Ø	PARAMETERS/VALUES STING COMB	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.96	3.48	4.96	TEST RUN NUMBERS
R1A079	T_2 (SIDE-MOUNTED	98	0	90	SIDE	0	E	3	42	37	38	
R1A080	ET WITHOUT	100	0	90	SIDE	0	E	3	41	40	39	
	PROTUBERANCES)											

1 7 13 19 25 31 37 43 49 55 61 67 75 76

C.P. COEFFICENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

MSFC - Form 263-2 (Rev. May 1973)

TABLE II. (Continued)

TEST: MSFC TWT 596 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: [illegible]

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES OFF SET	PARAMETERS/VALUES MT.	PARAMETERS/VALUES ϕ	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.96	3.48	4.96	TEST RUN NUMBERS
R1A 081	T, (TAIL-MOUNTED	-8	0	0	TAIL	45	2		219	220	
082	ET WITH	-4					2		218	217	
083	PROTUBERANCES)	0					2		215	216	
084		4					2		214	213	
085		8		↓			2		211	212	
086		12		20			2		230	229	
087		16					2		227	228	
088		20					2		226	225	
089		24					2		223	224	
090		28		↓		↓	2		222	221	
091		-8		0		315	2		250	249	
092		-4					2		247	248	
093		0					2		246	245	
094		4					2		243	244	
095		8		↓			2		242	241	
096		12		20			2		239	240	
097		16					2		238	237	
A1A 098	↓	20	↓	↓	↓	↓	2		235	236	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CP

COEFFICENTS — IDVAR (1) — IDVAR (2) — NDV

α OR β SCHEDULES

MSFC - Form 263-2 (Rev. May 1973)

TABLE II. (Concluded)

TEST: MSFC TWT 596 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: July 1970

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES OFF SET	PARAMETERS/VALUES MT.	PARAMETERS/VALUES φ	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.96	3.48	4.96	TEST RUN NUMBERS
R1A099		24	0	20	TAIL	315	2		234	233	
R1A100		28	0	20	TAIL	315	2		231	232	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

C.P.

COEFFICENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

MSFC - Form 263-2 (Rev. May 1973)

TABLE III. MODEL DIMENSIONAL DATA

MODEL COMPONENT: EXTERNAL TANK - T_{12}

GENERAL DESCRIPTION: EXTERNAL OXYGEN - HYDROGEN TANK WITH OGIVE NOSE AND SEMI-ELIPTICAL TAIL. BEGINNING AT MODEL TANK STATION 0.927 AND ENDING AT STATION 6.522

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000041B

DIMENSIONS:	THEORETICAL FULL-SCALE	THEORETICAL MODEL SCALE
Length	1865 in.	5.595 in.
Max. Width	324 in.	0.972 in.
Fineness Ratio	5.756 in.	5.756 in.
Max. Cross-Sectional	572.555 ft^2	0.742 $in.^2$
Base	572.555 ft^2	0.742 $in.^2$
WL OF TANK CENTERLINE	400 in.	1.200 in.

TABLE III. (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT_5

GENERAL DESCRIPTION: FORWARD ORBITER/ET ATTACH STRUCTURE

(2 MEMBERS)

MODEL SCALE: 0.003

REFERENCE DRAWING: VL72-000088D

ALL DIMENSIONS IN INCHES MODEL SCALE

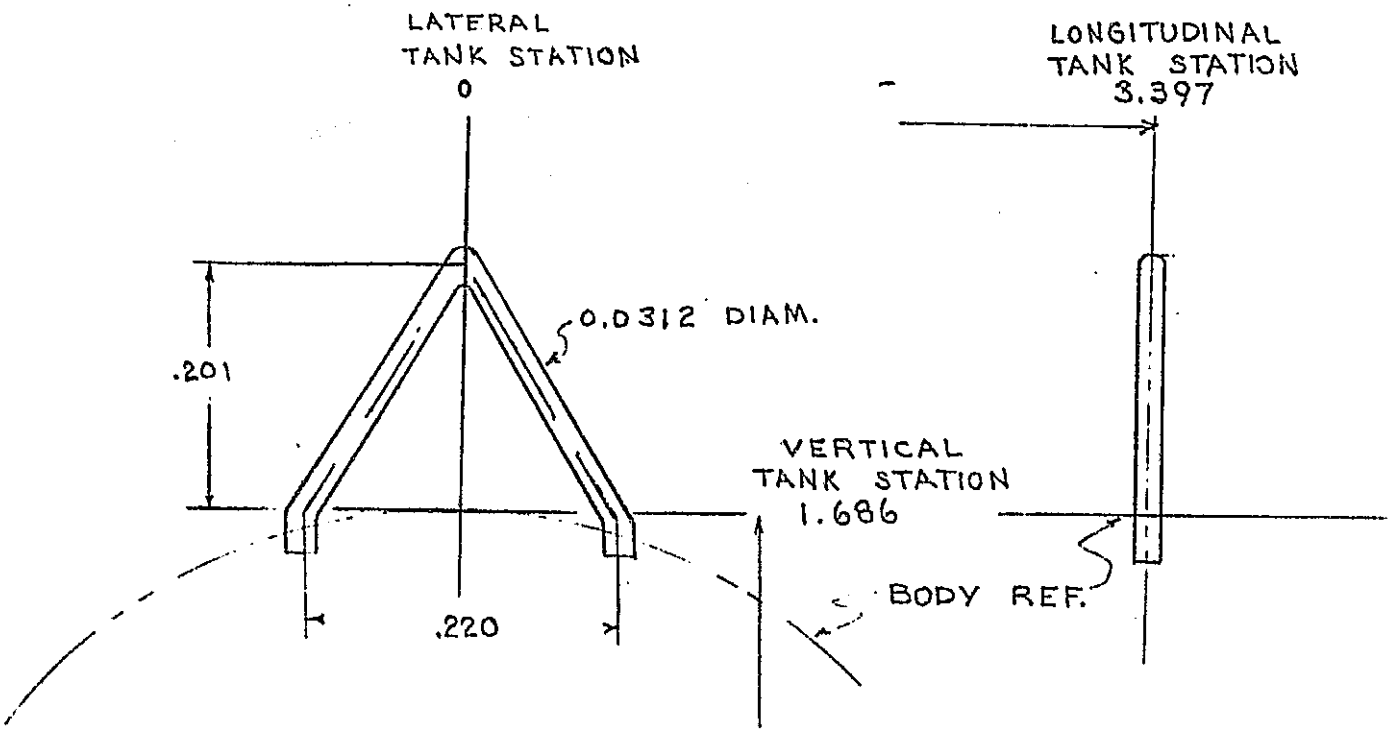


TABLE III. (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT_6

GENERAL DESCRIPTION: LEFT REAR ORBITER/ET ATTACH STRUCTURE (2 MEMBERS)

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000050

ALL DIMENSIONS IN INCHES MODEL SCALE

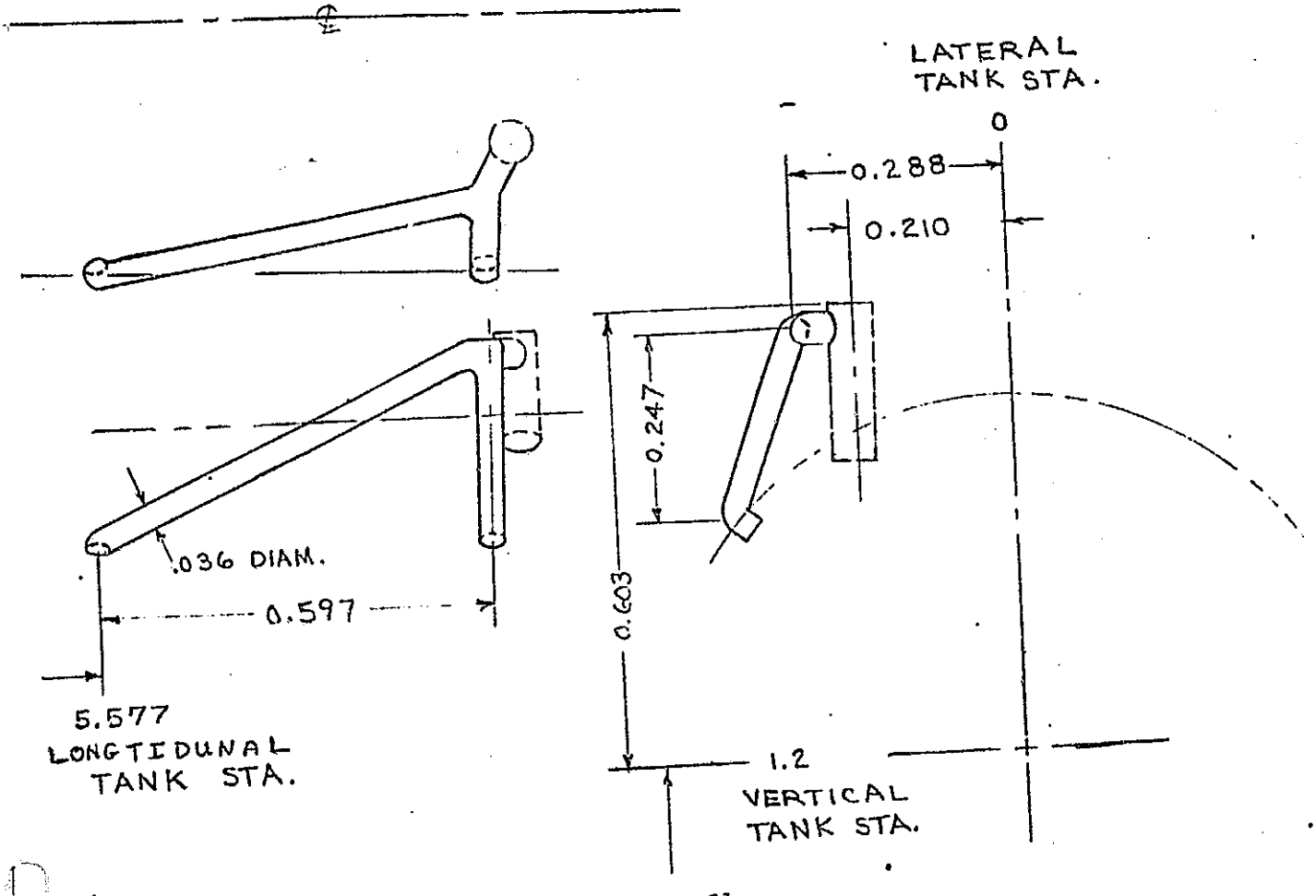


TABLE III. (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT_7

GENERAL DESCRIPTION: RIGHT REAR ORBITER/ET ATTACH STRUCTURE (3 MEMBERS)

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000050

ALL DIMENSIONS IN INCHES MODEL SCALE

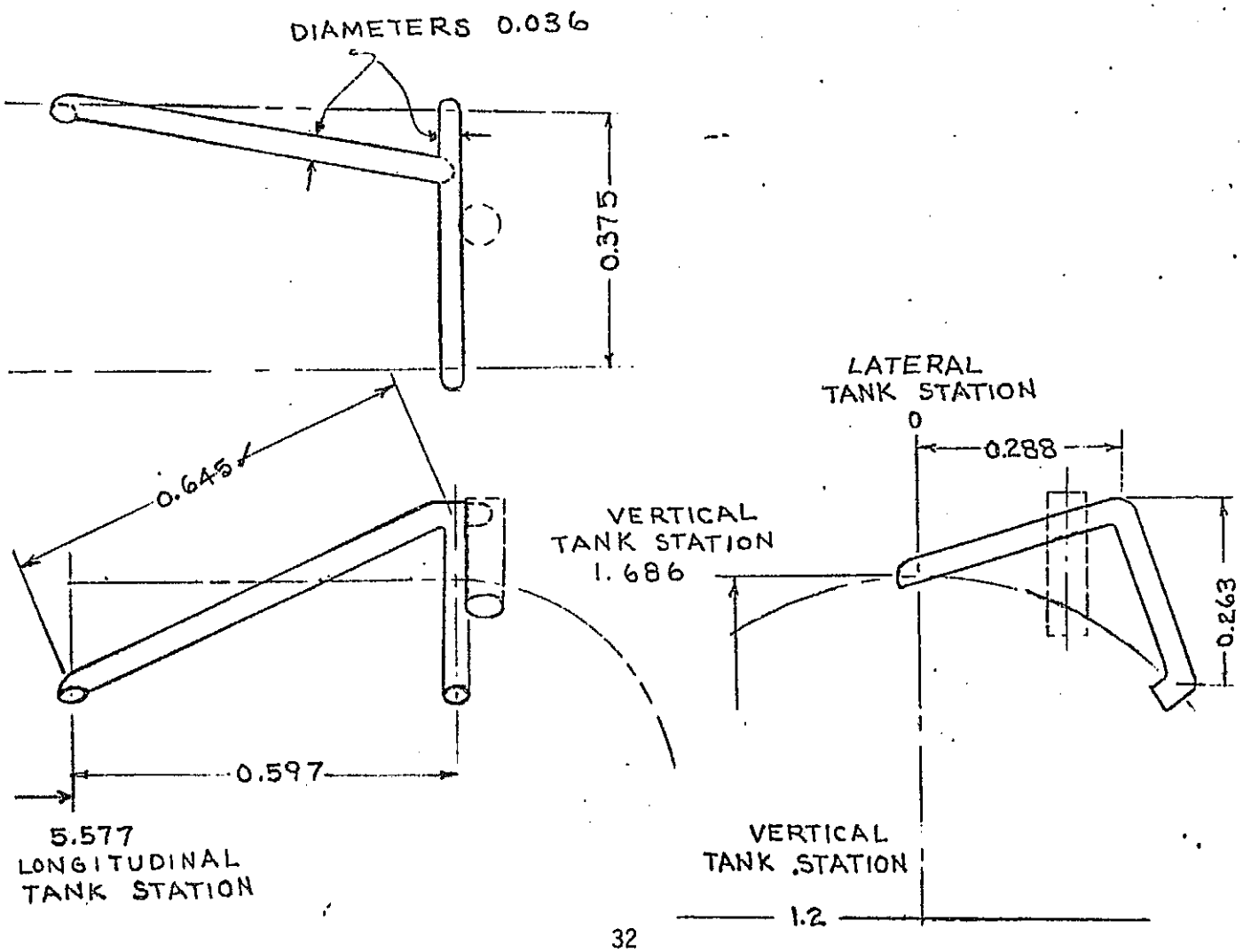


TABLE III. (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT_8

GENERAL DESCRIPTION: FORWARD SRB/ET ATTACH STRUCTURE (ET PORTION TESTED ONLY)

MODEL SCALE: 0.003

REFERENCE DRAWING: VL77-000051A

ALL DIMENSIONS IN INCHES MODEL SCALE

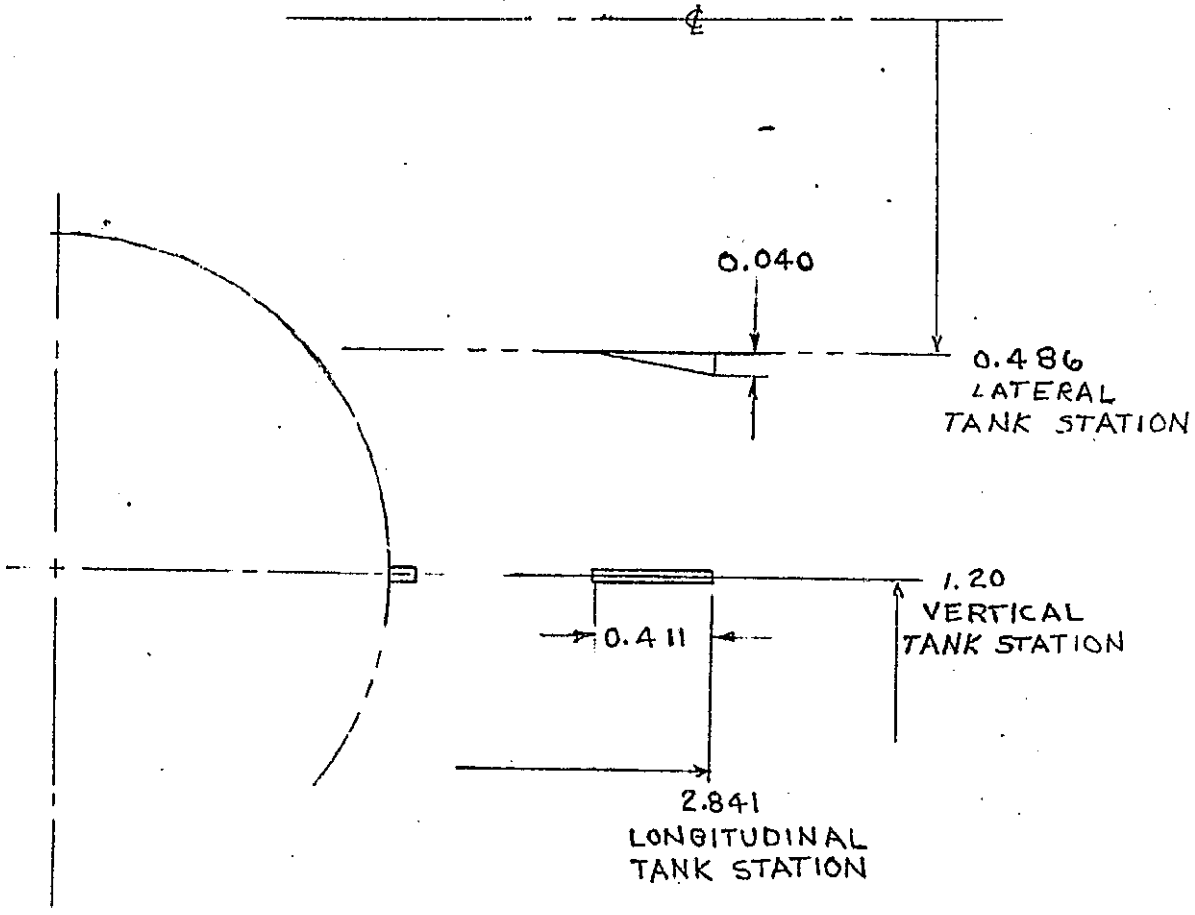


TABLE III. (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT_9

GENERAL DESCRIPTION: AFT SRB/ET ATTACH STRUCTURE (3 MEMBERS) (ET PORTION TESTED ONLY)

MODEL SCALE: 0.003

REFERENCE DRAWING: VL72-000106

ALL DIMENSIONS IN INCHES MODEL SCALE

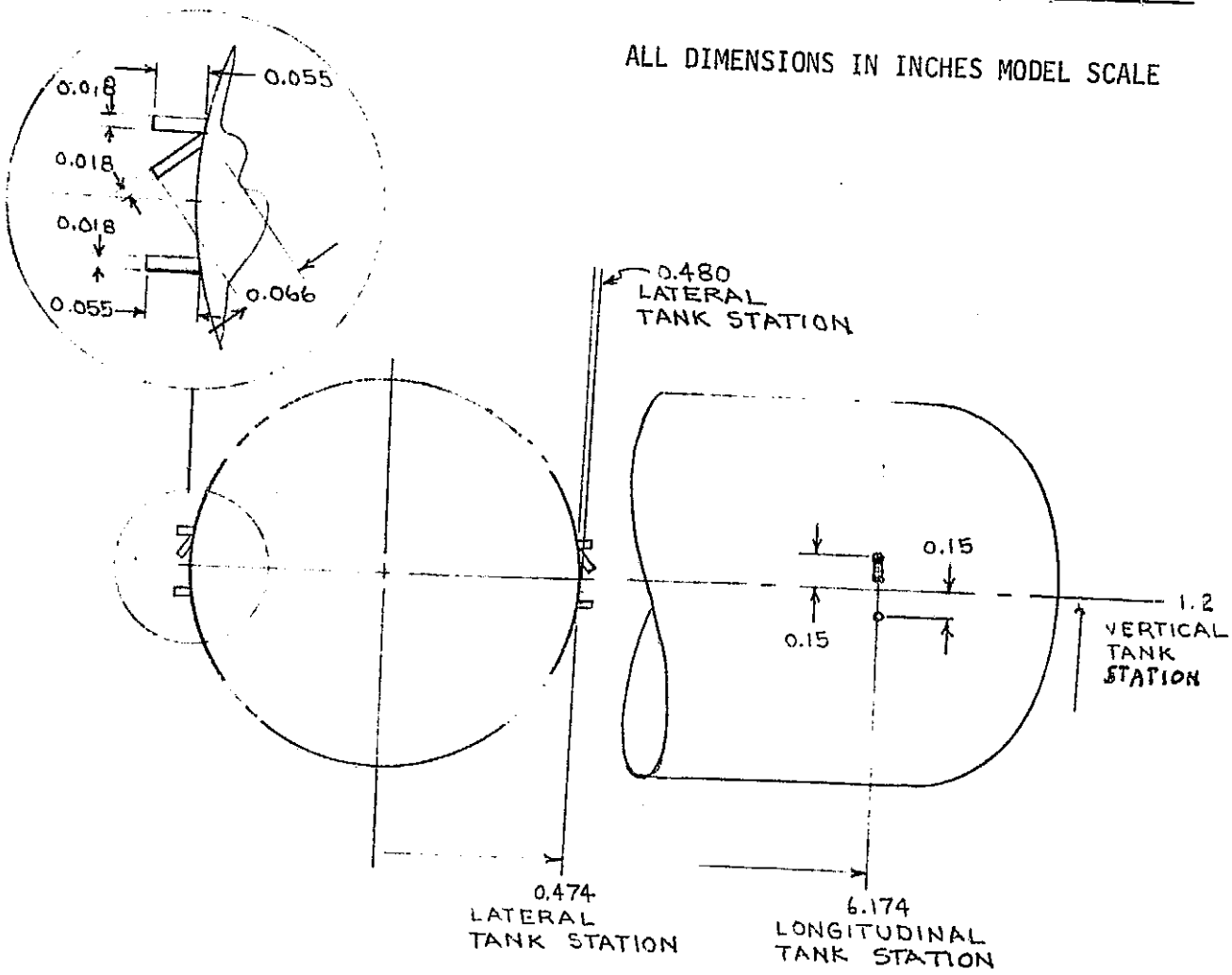


TABLE III. (Continued)

MODEL COMPONENT: LOX VENT LINE FAIRING - PT_1

GENERAL DESCRIPTION: VENT LINE ALONG UPPER RIGHT SIDE OF ET OGIVE NOSE BEGINNING AT MODEL STATIONS $X_T = 0.927$, $Y_T = 0$, AND $Z_T = 1.2$; TERMINATING AT $X_T = 2.841$, $Y_T = 0.162$, $Z_T = 1.658$

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000031A

DIMENSIONS:	THEORETICAL FULL-SCALE	THEORETICAL MODEL SCALE
Length	638 in.	1.914 in.
Max. Width	17.7 in.	0.053 in.
Max. Depth	9.3 in.	0.028 in.
Radial Position	19 1/2°	19 1/2°

TABLE III. (Continued)

MODEL COMPONENT: LOX FEED LINE - PT_2

GENERAL DESCRIPTION: LONGITUDINAL FUEL LINE ALONG UPPER RIGHT SIDE OF ET BEGINNING AT MODEL STATIONS X_T = 2.841, $-Y_T$ = 0.194, AND Z_T = 1.645; TERMINATING AT X_T = 6.116, $-Y_T$ = 0.194, AND Z_T = 1.645

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000031A

DIMENSIONS:	THEORETICAL FULL-SCALE	THEORETICAL MODEL SCALE
Length	1092 in.	3.275 in.
Max. Width	30.7 in.	0.092 in.
Max. Height	28 in.	0.084 in.
Radial Position	23 1/2°	23 1/2°

TABLE III. (Continued)

MODEL COMPONENT: LH_2 FEED LINE - PT_3

GENERAL DESCRIPTION: LONGITUDINAL FUEL LINE ALONG UPPER LEFT SIDE OF ET

BEGINNING AT MODEL STATIONS X_T = 2.841, Y_T = 0.275, AND Z_T = 1.601

TERMINATING AT STATIONS X_T = 6.116, Y_T = 0.275, AND Z_T = 1.601

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000031A

DIMENSIONS:	THEORETICAL FULL-SCALE	MODEL SCALE
Length	1092 in.	3.275 in.
Max. Width	25.7 in.	0.077 in.
Max. Depth	14.7 in.	0.044 in.
Radial Position	-33°	-33°

TABLE III. (Continued)

MODEL COMPONENT: LOX FEED LINE - FL1

GENERAL DESCRIPTION: 18-INCH DIAMETER VERTICAL FUEL LINE AT AFT END OF ET ON RIGHT

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000050

ALL DIMENSIONS IN INCHES MODEL SCALE

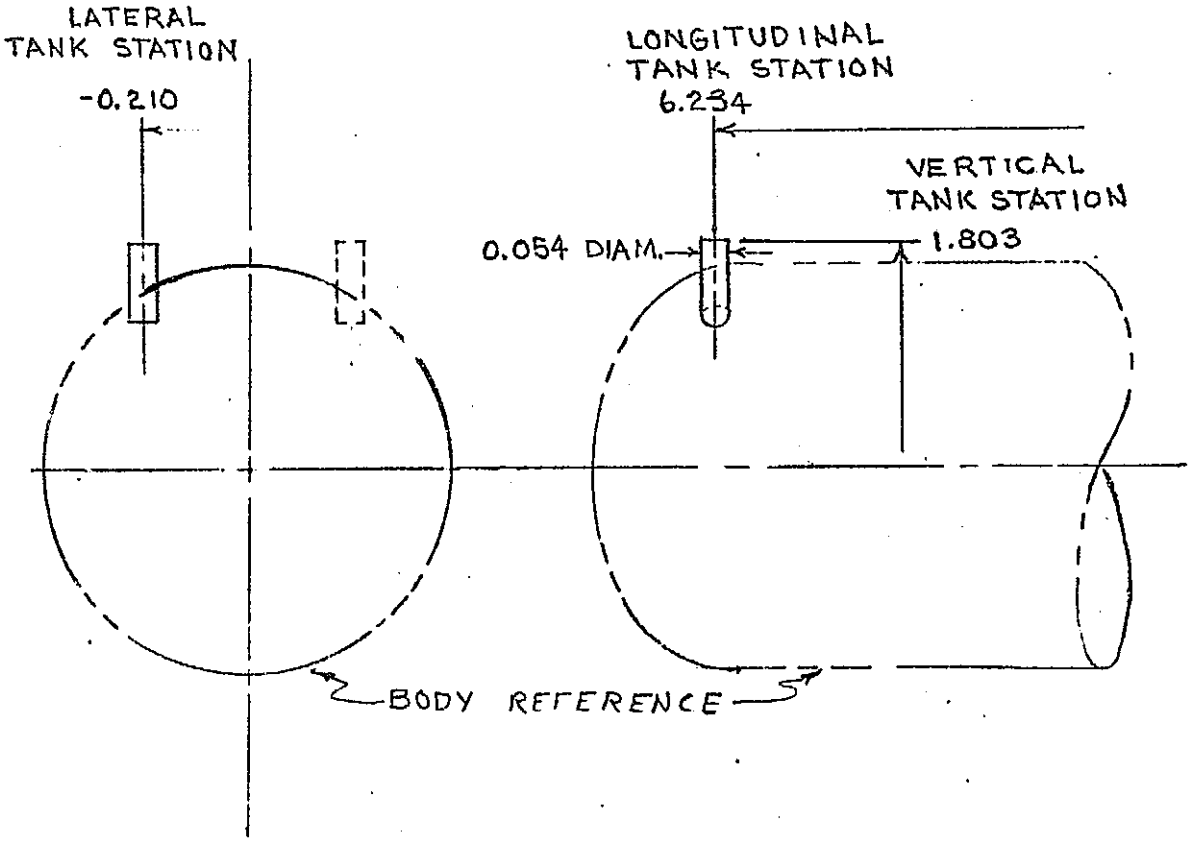


TABLE III. (Continued)

MODEL COMPONENT: LH_2 FEED LINE - FL_2

GENERAL DESCRIPTION: 18-INCH DIAMETER VERTICAL FUEL LINE AT AFT END OF ET ON LEFT

MODEL SCALE: 0.003

REFERENCE DRAWING: VL78-000050

ALL DIMENSIONS IN INCHES MODEL SCALE

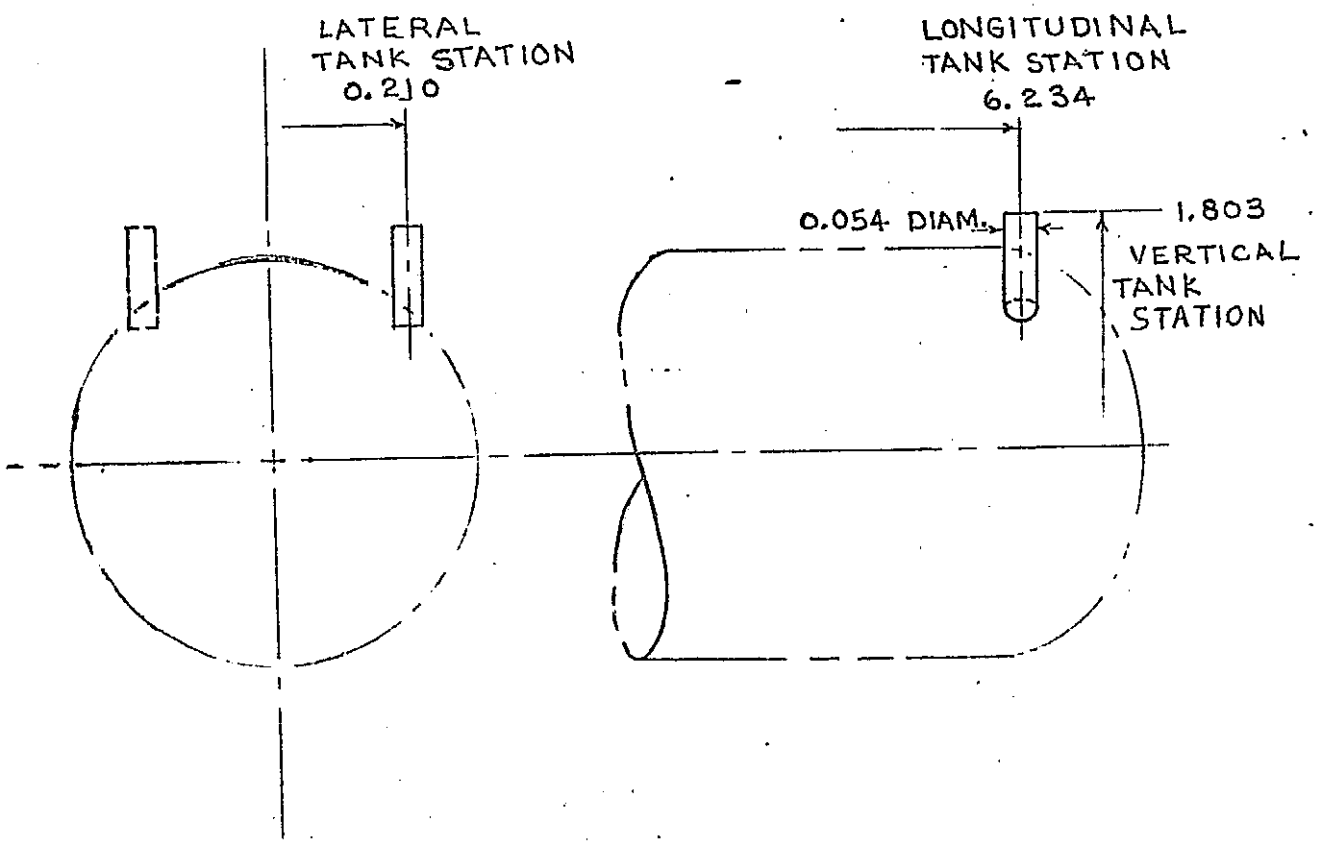


TABLE III. (Concluded)

MODEL COMPONENT: ATTACH STRUCTURE - FR_6

GENERAL DESCRIPTION: AFT ET/ORBITER CROSS MEMBER (CROSS SECTION 11 IN. x 15 IN.)

LOCATED AT ET-STATION 2050.5

MODEL SCALE: 0.003

REFERENCE DRAWING: FIGURE 3, MARTIN MARIETTA MEMO SA-A-74-9

ALL DIMENSIONS IN INCHES MODEL SCALE

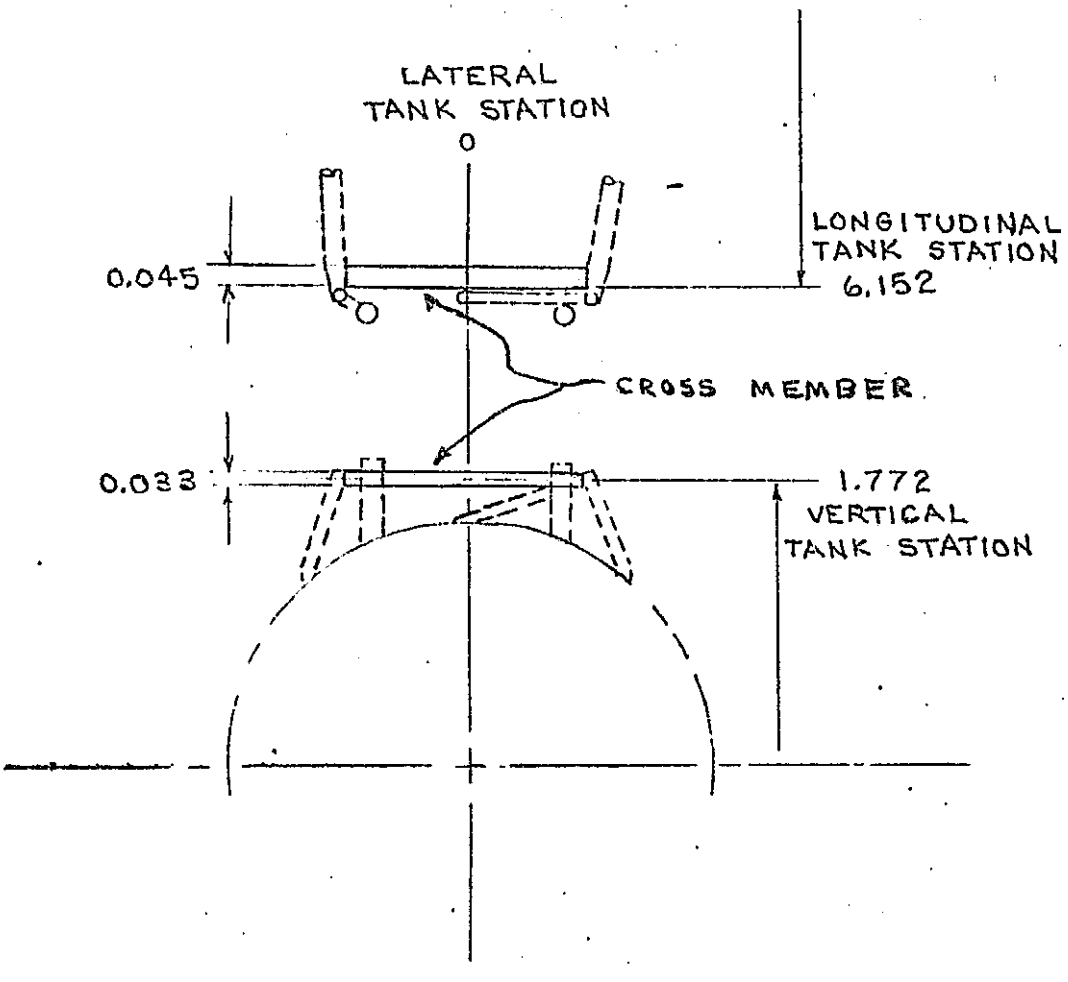


TABLE IV. TABULATED DATA PRINT-OUT FORMAT AND CORRELATION BETWEEN TUBE NUMBER, ORIFICE NUMBER, AND ORIFICE LOCATION ON MODEL

*inoperable orifice

SIDE-MOUNTED ET (T_2 CONFIGURATION)

RADIAL LOCATION θ (deg.)	RADIAL ROW NO.	LONG. STA. NO.	LONG. STA. X (in.)	X/ℓB	0.055	0.108	0.162	0.216	0.322	0.518	0.610	0.735	0.860	0.892	0.923	0.954
					0.305	0.605	0.905	1.205	1.800	2.900	3.410	4.110	4.810	4.985	5.160	5.335
					1	2	3	4	5	6	7	8	9	10	11	12
0	A				1	2	3	4	5	*6	*7	8	9	10	11	12
14	B					13	14	15	16	*17	*18	19	20	21	22	23
24	C												24	25	26	27
45	D				28	29	30	31	32	33	34	35	36	37	38	39
67½	E					40	41	42	43	44	45	46	47	48	49	50
90	F				51	52	53	54	55	56	57	59	59	60	61	62
112½	G					63	64	65	66	67	68	69	70	71	72	73
135	H				74	75	76	77	78	79	80	81	82	83	84	85
157½	I					86	87	88	89	90	91	92	93	94	95	96
180	J				97	98	99	100	101	102	103	104	105	106	107	108
202½	K					109	110	111	112	113	114	115	116	117	118	119
225	L				120	121	122	123	124	125	126	127	128	129	130	131
247½	M					132	133	134	135	136	137	138	139	140	141	142
270	N				143	144	145	146	147	148	149	150	151	152	153	154
292½	O					155	156	157	158	159	160	161	162	163	164	165
315	P				166	167	168	169	170	171	172	173	174	175	176	177
326	Q												178	179	180	181
346	R					182	183	184	185	*186	*187	188	189	190	191	192

TABLE IV. TABULATED DATA PRINT-OUT FORMAT AND CORRELATION BETWEEN TUBE NUMBER, ORIFICE NUMBER, AND ORIFICE LOCATION ON MODEL (CONCLUDED)

SIDE-MOUNTED ET (T_2 CONFIGURATION)

*inoperable orifice

CIRCUM. STA θ(deg.)	CIRCUM. ROW LONG. STA. No.	X/L LONG. STA. X (in.)	0.055	0.108	0.162	0.216	0.322	0.518	0.610	0.735	0.860	0.892	0.923	0.954
			0.305	0.605	0.905	1.205	1.800	2.900	3.410	4.110	4.810	4.985	5.160	5.335
			1	2	3	4	5	6	7	8	9	10	11	12
0	A		1	2	3	4	5	*6	*7	8	9	10	11	12
14	B			13	14	15	16	*17	*18	19	20	21	22	23
24	C										24	25	26	27
45	D		28	29	30	31	32	33	34	35	36	37	38	39
67½	E			40	41	42	43	44	45	46	47	48	49	50
90	F		51	52	53	54	55	56	57	58	59	60	61	62
112½	G			63	64	65	66	67	68	69	70	71	72	73
135	H		74	75	76	77	78	79	80	81	82	83	84	85
157½	I			86	87	88	89	90	91	92	93	94	95	96
180	J		97	98	99	100	101	102	103	104	105	106	107	108
202½	K			109	110	111	112	113	114	115	116	117	118	119
225	L		120	121	122	123	124	125	126	127	128	129	130	131
247½	M			132	133	134	135	136	137	138	139	140	141	142
270	N		143	144	145	146	147	148	149	150	151	152	153	154
292½	O			155	156	157	158	159	160	161	162	163	164	165
315	P		166	167	168	169	170	171	172	173	174	175	176	177
326	Q										178	179	180	181
346	R			182	183	184	185	*186	*187	188	189	190	191	192

TABLE V. TABULATED DATA PRINT-OUT FORMAT AND CORRELATION BETWEEN TUBE NUMBER, ORIFICE NUMBER, AND ORIFICE LOCATION ON MODEL

*inoperable orifice

TAIL-MOUNTED ET (T_1 CONFIGURATION)

RADIAL LOCATION θ (deg.)	RADIAL ROW NO.	LONG. STA. NO.	LONG. STA. X (in.)	X/ℓB
			0.055	0.108	0.162	0.216	0.322	0.518	0.610	0.735	0.860	0.892	0.923	0.954
			0.305	0.605	0.905	1.205	1.800	2.900	3.410	4.110	4.810	4.985	5.160	5.335
			1	2	3	4	5	6	7	8	9	10	11	12
0	A		1	2	3	4	5	6	7	8	9	10	11	12
14	B			13	14	15	16	17	18	19	20	21	22	23
24	C										24	25	26	27
45	D		28	29	30	31	32	33	34	35	36	37	38	39
67½	E			40	41	42	43	44	45	46	47	48	49	50
90	F		51	52	53	54	*55	56	57	58	59	60	61	62
112½	G			63	64	65	66	67	68	69	70	71	72	73
135	H		74	75	76	77	78	79	80	81	*82	83	84	85
157½	I			86	87	88	89	90	91	92	93	94	95	96
180	J		97	98	99	100	101	102	103	104	105	106	107	108
202½	K			109	110	111	112	113	114	115	116	117	118	119
225	L		120	121	122	123	124	125	126	127	128	129	130	131
247½	M			132	133	134	135	136	137	138	139	140	141	142
270	N		143	144	145	146	*147	148	149	150	151	152	153	154
292½	O			155	156	157	158	159	160	161	162	163	164	165
315	P		166	167	168	169	170	171	172	173	174	175	176	177
326	Q										178	179	180	181
346	R			182	183	184	185	186	187	188	189	190	191	192

TABLE V. TABULATED DATA PRINT-OUT FORMAT AND CORRELATION BETWEEN TUBE NUMBER, ORIFICE NUMBER, AND ORIFICE LOCATION ON MODEL (CONCLUDED)

TAIL-MOUNTED ET (T_1 CONFIGURATION)

*inoperable orifice

CIRCUM. STA θ(deg.)	CIRCUM. ROW	LONG. STA. X (in.) / X/L	0.055	0.108	0.162	0.216	0.322	0.518	0.610	0.735	0.860	0.892	0.923	0.954
		LONG. STA. No.	0.305	0.605	0.905	1.205	1.800	2.900	3.410	4.110	4.810	4.985	5.160	5.335
			1	2	3	4	5	6	7	8	9	10	11	12
0	A		1	2	3	4	5	6	7	8	9	10	11	12
14	B		X	13	14	15	16	17	18	19	20	21	22	23
24	C		X	X	X	X	X	X	X	X	24	25	26	27
45	D		28	29	30	31	32	33	34	35	36	37	38	39
67½	E		X	40	41	42	43	44	45	46	47	48	49	50
90	F		51	52	53	54	*55	56	57	58	59	60	61	62
112½	G		X	63	64	65	66	67	68	69	70	71	72	73
135	H		74	75	76	77	78	79	80	81	*82	83	84	85
157½	I		X	86	87	88	89	90	91	92	93	94	95	96
180	J		97	98	99	100	101	102	103	104	105	106	107	108
202½	K		X	109	110	111	112	113	114	115	116	117	118	119
225	L		120	121	122	123	124	125	126	127	128	129	130	131
247½	M		X	132	133	134	135	136	137	138	139	140	141	142
270	N		143	144	145	146	*147	148	149	150	151	152	153	154
292½	O		X	155	156	157	158	159	160	161	162	163	164	165
315	P		166	167	168	169	170	171	172	173	174	175	176	177
326	Q		X	X	X	X	X	X	X	X	178	179	180	181
346	R		X	182	183	184	185	186	187	188	189	190	191	192

Table VI.

0.003-SCALE 324-INCH ET REFERENCE DIMENSIONS

DIMENSION	FULL SCALE	MODEL SCALE
Reference Area, S_{ref} (cross-sectional area of ET)	572.555 FT^2	0.742 $IN.^2$
Reference Length, ℓ_{ref} (ET diameter)	324 IN.	0.972 IN.
Reference Span, b_{ref} (ET diameter)	324 IN.	0.972 IN.
Moment Reference Point, MRP (dry weight c.g.)		
XMRP (from nose)	1086.4 IN.	3.259 IN.
YMRP	0	0
ZMRP (model centerline)	400 IN.	1.2 IN.
Base Area, A_b (cross-sectional area of ET)	572.555 FT^2	0.742 $IN.^2$

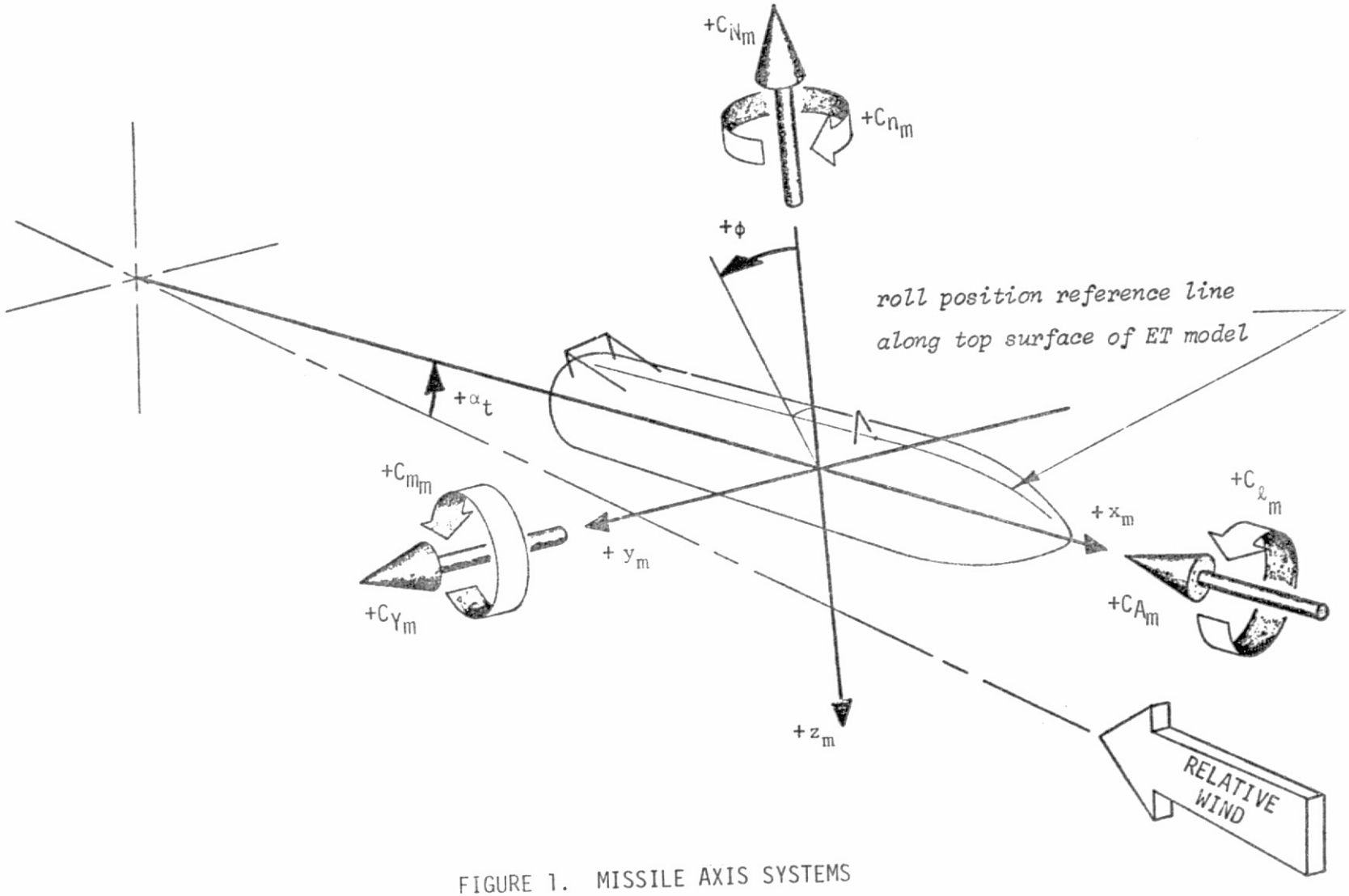
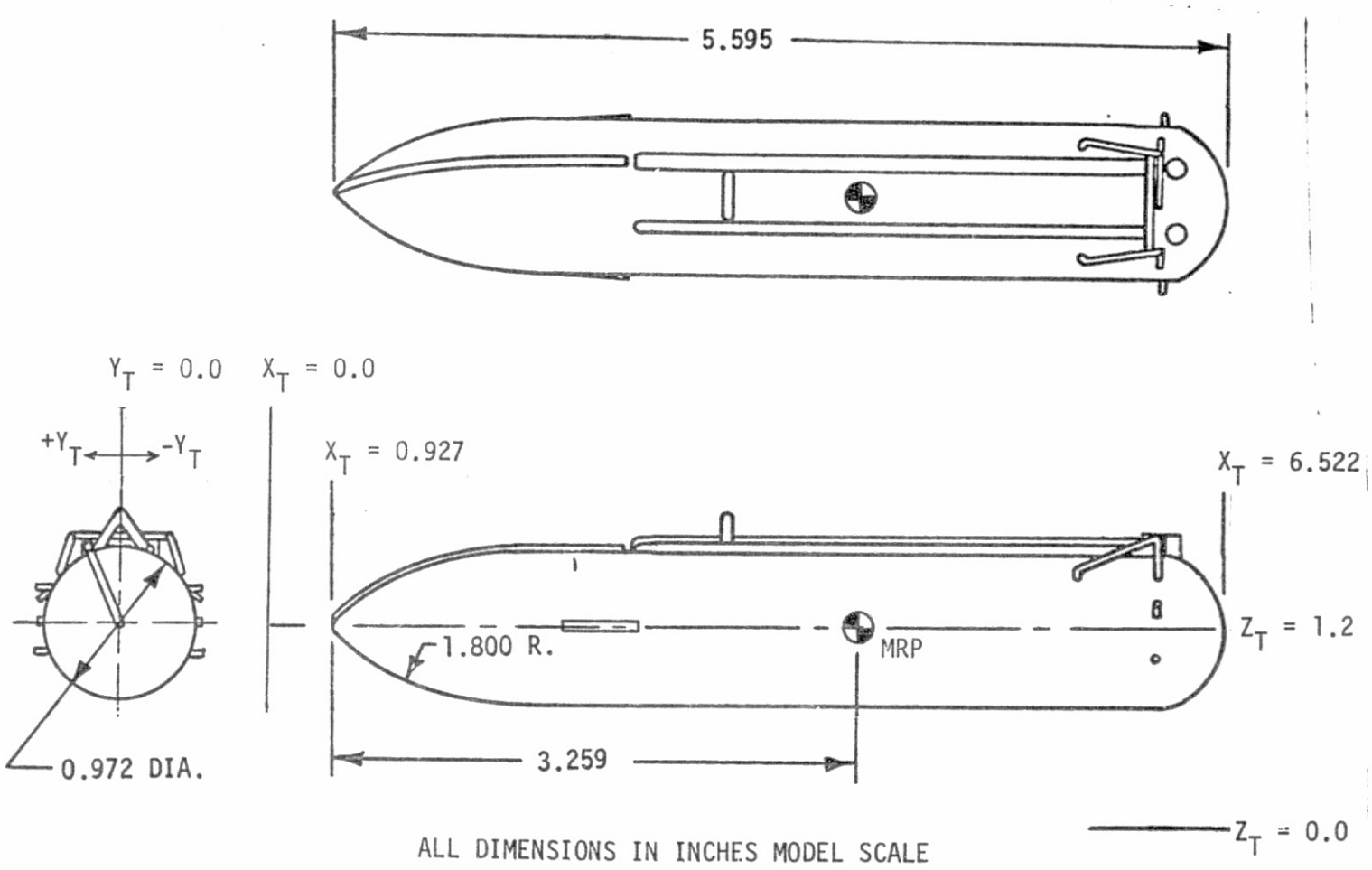
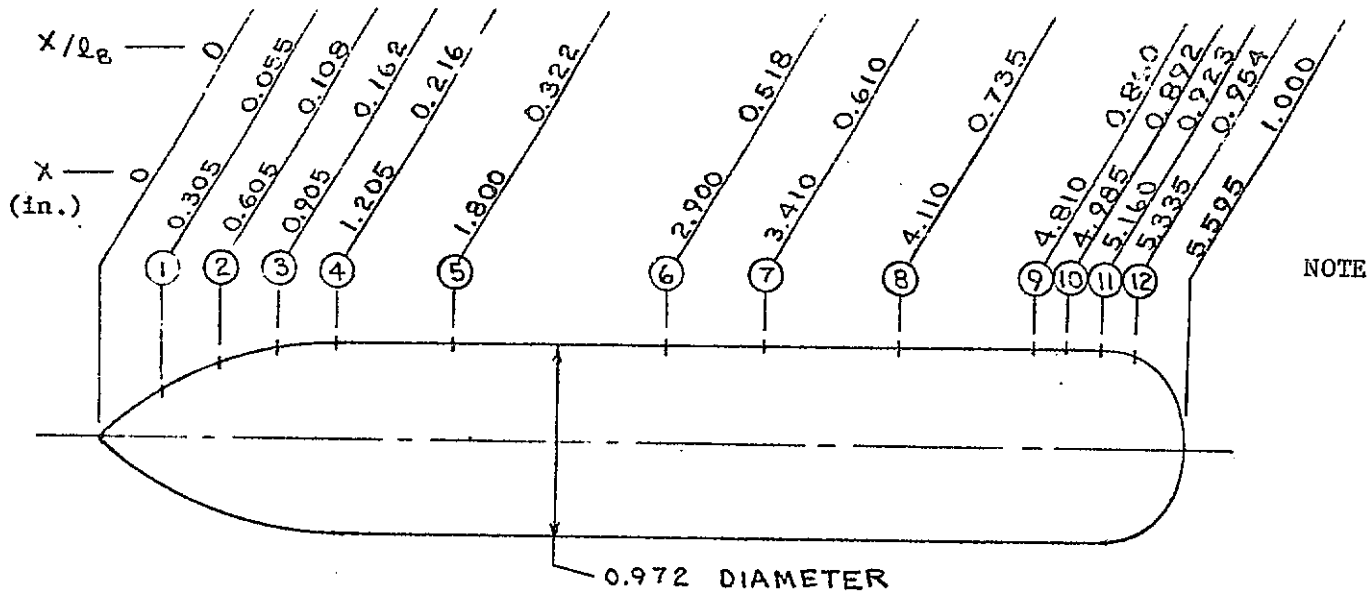


FIGURE 1. MISSILE AXIS SYSTEMS

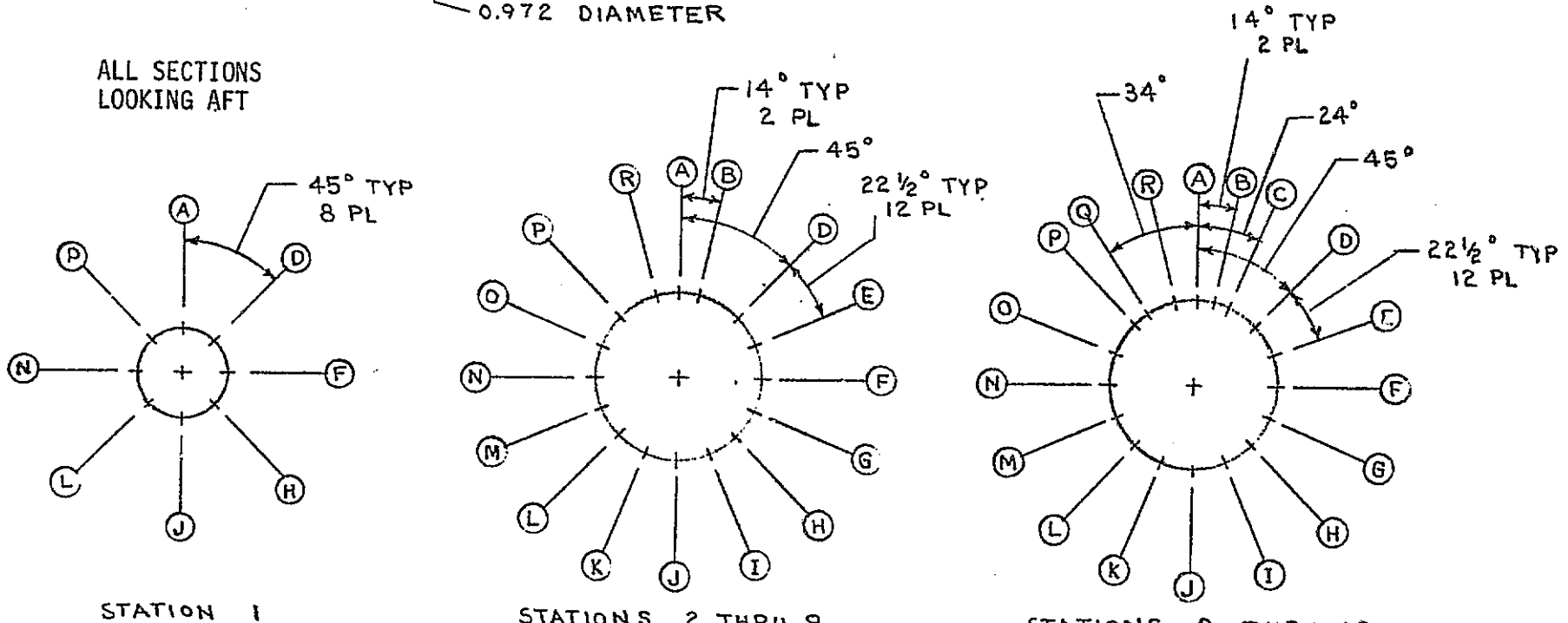


a. GENERAL ARRANGEMENT OF MSFC MODEL NO. 460, CONFIGURATION T_1 EXTERNAL TANK WITH PROTUBERANCES

Figure 2. MODEL SKETCHES

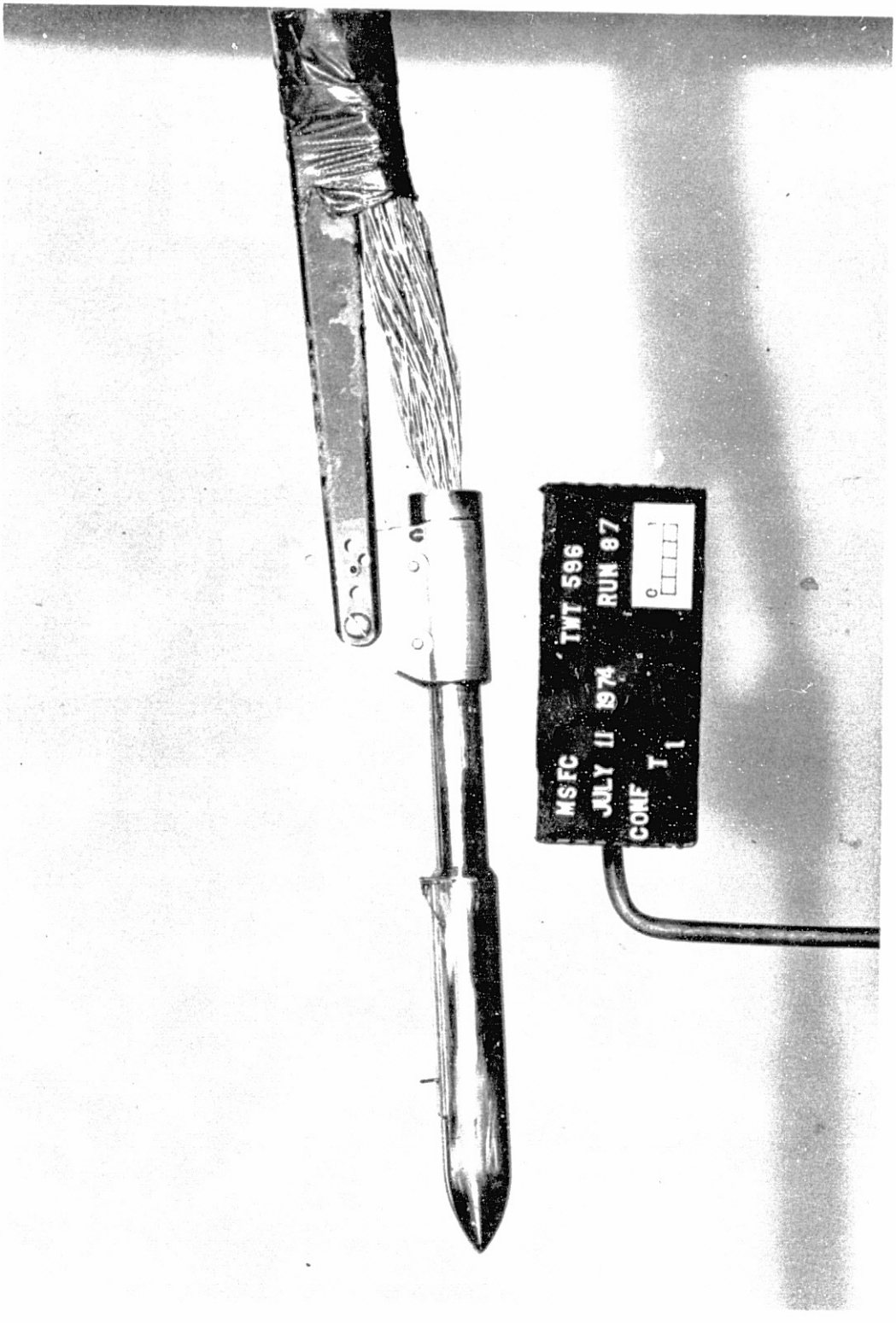


NOTE: ○ Denotes longitudinal and radial location of orifices. (192 total, though some may be missing due to sting cavities or protuberances.



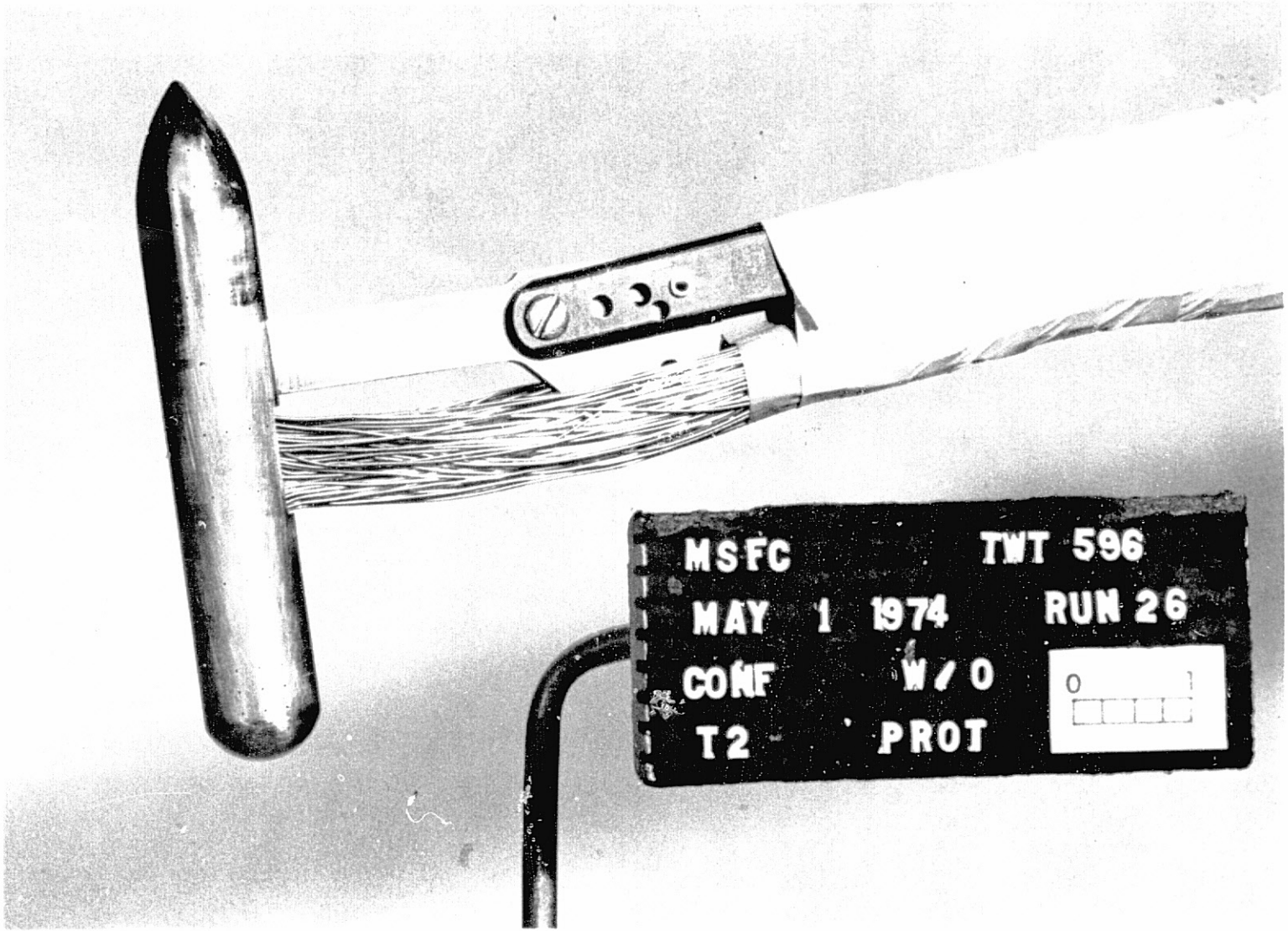
b. EXTERNAL TANK MODEL PRESSURE ORIFICE LOCATIONS

Figure 2. CONCLUDED



EXTERNAL TANK MODEL NO. 460, CONFIGURATION T_1 TAIL-MOUNTED WITH PROTUBERANCES

Figure 3. MODEL PHOTOGRAPHS



b. EXTERNAL TANK MODEL NO. 460, CONFIGURATION T_2 SIDE-MOUNTED WITHOUT PROTUBERANCES

Figure 2. CONCLUDED

APPENDIX

TABULATED SOURCE DATA

VOLUME 5

Tabulations of plotted data are available
from Data Management Services upon request.

DATE 05 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION PAGE 1

MSFC 596 (TA-2F) MLR0200 EXTERNAL TANK, T1 (R1A001) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = -8.380 BETA = .00000 Q(PSI) = 10.263 PO = 28.005 P = 3.9330

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7131	.4585	.1684	-.0105	.0104	.0086	.0097	.0097	.0108	.1316	.6336	-.2287
14.000		.4495	.1683	-.0102	.0051	-.1014	-.0357	-.0034	.0138	.1295	.4860	-.2237
24.000									.0726	.1164	.3587	-.2492
45.000	.7236	.3701	.1226	-.0353	-.0030	-.0523	-.0669	-.0440	-.0989	.0338	.1028	-.2681
67.500		.3211	.0864	-.0724	-.0544	-.0540	-.1100	-.0750	-.0829	-.0472	.0492	-.2426
90.000	.5622	.2469	.0394	-.1008	9.9990	-.0665	-.1151	-.0944	-.0672	-.0702	.0214	-.1981
112.500		.1978	-.0047	-.1267	-.1218	-.0957	-.1029	-.0651	-.0462	-.0459	.0312	-.1617
135.000	.4557	.1578	-.0302	-.1520	-.1294	-.0947	-.0559	-.0464	9.9990	-.0408	-.0336	-.1592
157.500		.1187	-.0446	-.1638	-.1174	-.0556	-.0239	-.0231	-.0261	-.0337	-.0359	-.1582
180.000	.4029	.1044	-.0564	-.1615	-.1135	-.0281	-.0107	-.0066	-.0168	-.0160	-.0276	-.1444
202.500		.1123	-.0548	-.1657	-.1250	-.0382	-.0288	-.0322	-.0306	-.0227	-.0351	-.1492
225.000	.4312	.1438	-.0370	-.1575	-.1202	-.0697	-.0437	-.0490	-.0358	-.0268	-.0357	-.1598
247.500		.1890	-.0095	-.1368	-.1134	-.0931	-.0810	-.0599	-.0464	-.0385	.0191	-.1665
270.000	.5433	.2505	.0338	-.1086	9.9990	-.0834	-.1022	-.0871	-.0641	-.0792	.0481	-.2177
292.500		.3049	.0783	-.0795	-.0457	-.0472	-.1004	-.0691	-.1056	-.0596	.1172	-.2265
315.000	.7210	.3743	.1257	-.0588	-.0230	-.0456	-.0505	-.0471	-.1066	-.0156	.2178	-.2383
326.000									.0466	.0526	.1520	-.2573
346.000		.4661	.1776	-.0083	.0078	-.0953	.0025	-.0170	.0827	.1370	.3281	-.2582
360.000	.7131	.4585	.1684	-.0105	.0104	.0086	.0097	.0097	.0108	.1316	.6336	-.2287

MACH (2) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8640 PO = 60.027 P = .8100

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7373	.4298	.1973	.0473	.0405	-.0040	.0117	.0191	.0202	.0930	.2471	-.0661
14.000		.4205	.1927	.0489	.0393	-.0136	.0027	.0179	.0179	.0985	.2376	-.0525
24.000									.0324	.1176	.2061	-.0859
45.000	.6989	.3594	.1548	.0274	.0353	.0082	-.0159	-.0029	-.0080	.0015	.0928	-.0869
67.500		.3079	.1220	.0065	.0026	-.0041	-.0266	-.0019	-.0283	-.0261	.0290	-.0836
90.000	.5195	.2403	.0820	-.0148	9.9990	-.0357	-.0379	-.0407	-.0481	-.0475	-.0289	-.0813
112.500		.1852	.0454	-.0345	-.0401	-.0497	-.0497	-.0497	-.0503	-.0441	-.0328	-.0661
135.000	.3774	.1474	.0166	-.0469	-.0469	-.0447	-.0441	-.0402	9.9990	-.0435	-.0424	-.0689
157.500		.1238	.0060	-.0531	-.0458	-.0418	-.0373	-.0221	.0026	-.0227	-.0249	-.0683
180.000	.3239	.1069	.0009	-.0559	-.0446	-.0311	-.0232	.0009	-.0086	-.0091	-.0136	-.0661
202.500		.1193	.0049	-.0548	-.0435	-.0413	-.0362	-.0210	-.0244	-.0221	-.0283	-.0661

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A001)

MACH (2) = 3.480 ALPHA (1) = -8.360

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.3617	.1400	.0138	-.0509	-.0486	-.0441	-.0435	-.0374	-.0424	-.0407	-.0424	-.0678
247.500		.1796	.0381	-.0390	-.0424	-.0514	-.0531	-.0508	-.0503	-.0435	-.0300	-.0762
270.000	.5060	.2302	.0690	-.0216	9.9990	-.0419	-.0419	-.0464	-.0554	-.0537	-.0306	-.0824
292.500		.2878	.1097	.0015	.0111	-.0069	-.0255	-.0283	-.0345	-.0328	.0235	-.0880
315.000	.7344	.3595	.1531	.0243	.0170	.0254	-.0082	-.0004	-.0251	.0035	.1097	-.0773
326.000									.0381	.0404	.1065	-.0762
346.000		.4524	.2117	.0601	.0528	-.0362	.0223	.0184	.0387	.1120	.1862	-.0807
360.000	.7373	.4298	.1973	.0473	.0405	-.0040	.0117	.0191	.0202	.0930	.2471	-.0661

MACH (3) = 4.960 ALPHA (1) = -8.310 BETA = .00000 Q(PSI) = 3.0710 PO = 90.035 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7228	.3916	.1901	.1006	.1132	.0918	.0754	.0868	.0855	.1094	.1421	.0099
14.000		.3865	.1799	.0905	.0981	.0703	.0628	.0678	.0703	.0968	.1648	.0086
24.000									.0527	.0766	.1510	-.0013
45.000	.6648	.3425	.1624	.0792	.0830	.0515	.0540	.0578	.0490	.0691	.0729	-.0064
67.500		.2972	.1359	.0603	.0590	.0427	.0515	.0490	.0414	.0515	.0288	-.0039
90.000	.5088	.2342	.1057	.0502	9.9990	.0326	.0414	.0427	.0313	.0414	-.0039	-.0051
112.500		.1913	.0754	.0363	.0351	.0212	.0288	.0351	.0237	.0338	.0049	.0086
135.000	.3702	.1535	.0628	.0363	.0263	.0149	.0250	.0326	9.9990	.0237	.0011	.0124
157.500		.1309	.0527	.0250	.0275	.0175	.0238	.0301	.1082	.0275	.0023	.0149
180.000	.3098	.1157	.0439	.0200	.0225	.0174	.0200	.0250	.0225	.0200	.0061	.0149
202.500		.1258	.0464	.0200	.0225	.0074	.0175	.0212	.0137	.0225	-.0001	.0187
225.000	.3501	.1447	.0502	.0162	.0175	.0099	.0137	.0200	.0099	.0162	-.0039	.0162
247.500		.1813	.0641	.0212	.0162	.0011	.0074	.0162	.0073	.0124	.0074	-.0076
270.000	.4709	.2266	.0880	.0263	9.9990	.0036	.0099	.0175	.0049	.0112	.0074	-.0076
292.500		.2719	.1169	.0339	.0452	.0149	.0200	.0225	.0086	.0200	.0326	-.0127
315.000	.6850	.3425	.1447	.0464	.0464	.0301	.0288	.0313	.0095	.0326	.0641	-.0127
326.000									.0427	.0477	.0729	-.0139
346.000		.4155	.2039	.0729	.0829	.0162	.0376	.0426	.0452	.0792	.1245	-.0190
360.000	.7228	.3916	.1901	.1006	.1132	.0918	.0754	.0868	.0855	.1094	.1421	.0099

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A002) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 10.247 PO = 28.014 P = 3.8130

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6128	.3564	.0907	-.0665	-.0314	-.0352	-.0246	-.0257	-.0118	.1473	.5094	-.2149
14.000		.3504	.0950	-.0613	-.0164	-.1380	-.0330	-.0277	.0035	.1592	.3293	-.2318
24.000									.0270	.1425	.2644	-.2338
45.000	.6573	.3025	.0696	-.0647	-.0201	-.0390	-.0488	-.0292	-.0677	.0636	.1662	-.2419
67.500		.2825	.0693	-.0780	-.0512	-.0126	-.0855	-.0262	-.0587	-.0368	.1398	-.2130
90.000	.5720	.2490	.0511	-.0987	9.9990	-.0345	-.0522	-.0371	-.0280	-.0360	.0447	-.1969
112.500		.2343	.0281	-.1123	-.0949	-.0613	-.0477	-.0383	-.0296	-.0285	.0285	-.1662
135.000	.5011	.2205	.0138	-.1283	-.0974	-.0653	-.0359	-.0340	9.9990	-.0318	-.0295	-.1458
157.500		.2032	-.0012	-.1288	-.0933	-.0533	-.0311	-.0114	-.0107	-.0194	-.0277	-.1364
180.000	.4683	.1881	-.0107	-.1322	-.0937	-.0401	-.0224	-.0073	-.0148	-.0133	-.0257	-.1355
202.500		.1986	-.0080	-.1363	-.1053	-.0427	-.0344	-.0205	-.0186	-.0103	-.0163	-.1405
225.000	.4894	.2126	.0100	-.1269	-.0937	-.0427	-.0220	-.0348	-.0284	-.0129	-.0208	-.1482
247.500		.2231	.0281	-.1101	-.0848	-.0530	-.0270	-.0319	-.0232	-.0156	.0277	-.1666
270.000	.5660	.2563	.0428	-.0938	9.9990	-.0451	-.0341	-.0341	-.0281	-.0304	.0440	-.1979
292.500		.2837	.0609	-.0902	-.0434	-.0125	-.0619	-.0321	-.0555	-.0333	.1602	-.2251
315.000	.6483	.3196	.0810	-.0877	-.0409	-.0356	-.0564	-.0292	-.0824	-.0258	.2748	-.2302
326.000									.0511	-.0208	.1946	-.2402
346.000		.3715	.1066	-.0556	-.0405	-.1363	-.0194	-.0322	.0688	.1213	.2774	-.2327
360.000	.6128	.3564	.0907	-.0665	-.0314	-.0352	-.0246	-.0257	-.0118	.1473	.5094	-.2149

MACH (2) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 6.8810 PO = 60.006 P = .80900

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6212	.3344	.1347	.0140	.0140	-.0153	-.0085	-.0017	.0021	.0659	.1981	-.0650
14.000		.3261	.1283	.0133	.0144	-.0198	-.0136	-.0052	-.0018	.0748	.2145	-.0559
24.000									.0099	.0917	.1576	-.0847
45.000	.6170	.3008	.1165	.0065	.0189	.0105	-.0153	-.0108	-.0182	.0144	.0843	-.0807
67.500		.2805	.1024	-.0029	-.0012	.0009	-.0170	-.0165	-.0170	-.0125	.0370	-.0796
90.000	.5324	.2495	.0849	-.0114	9.9990	-.0221	-.0125	-.0204	-.0238	-.0182	.0004	-.0717
112.500		.2196	.0657	-.0215	-.0249	-.0283	-.0210	-.0198	-.0244	-.0210	-.0002	-.0610
135.000	.4580	.1983	.0511	-.0305	-.0300	-.0266	-.0209	-.0175	9.9990	-.0175	-.0176	-.0604
157.500		.1824	.0398	-.0351	-.0334	-.0244	-.0193	-.0142	.0144	-.0080	-.0097	-.0604
180.000	.4225	.1673	.0354	-.0373	-.0333	-.0238	-.0187	-.0119	-.0068	-.0018	-.0041	-.0638
202.500		.1803	.0399	-.0356	-.0311	-.0238	-.0192	-.0130	-.0097	-.0040	-.0097	-.0621

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A002)

MACH (2) = 3.480 ALPHA (1) = -4.330

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9830	.9540
THETA												
225.000	.4428	.1903	.0454	-.0322	-.0311	-.0272	-.0215	-.0182	-.0198	-.0148	-.0153	-.0610
247.500		.2131	.0591	-.0243	-.0271	-.0288	-.0226	-.0198	-.0243	-.0209	-.0013	-.0683
270.000	.5291	.2444	.0781	-.0142	9.9990	-.0244	-.0159	-.0210	-.0249	-.0210	-.0052	-.0756
292.500		.2699	.0951	-.0057	.0060	-.0057	-.0108	-.0175	-.0209	-.0226	.0212	-.0818
315.000	.6404	.3030	.1159	.0037	.0032	.0144	-.0159	-.0097	-.0311	-.0086	.0759	-.0751
326.000									.0381	.0082	.0843	-.0734
346.000		.3600	.1492	.0257	.0223	-.0446	-.0007	-.0035	.0150	.0815	.1493	-.0801
360.000	.6212	.3344	.1347	.0140	.0140	-.0153	-.0085	-.0017	.0021	.0659	.1981	-.0650

MACH (3) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0710 PO = 90.038 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5830	.2997	.1447	.0880	.0968	.0830	.0679	.0742	.0729	.0842	.0842	.0061
14.000		.2997	.1359	.0817	.0830	.0628	.0578	.0653	.0578	.0779	.1157	-.0001
24.000									.0338	.0527	.0931	-.0076
45.000	.5842	.2833	.1233	.0679	.0666	.0502	.0464	.0653	.0389	.0565	.0464	-.0114
67.500		.2682	.1183	.0553	.0565	.0364	.0490	.0704	.0452	.0452	.0187	-.0102
90.000	.5068	.2417	.1044	.0515	9.9990	.0351	.0414	.0477	.0326	.0401	.0023	-.0051
112.500		.2165	.0893	.0414	.0389	.0250	.0338	.0527	.0275	.0364	.0137	.0187
135.000	.4420	.1963	.0754	.0351	.0313	.0212	.0263	.0527	9.9990	.0288	.0074	.0200
157.500		.1812	.0666	.0300	.0263	.0187	.0225	.0540	.0955	.0263	.0036	.0200
180.000	.4105	.1749	.0691	.0300	.0275	.0137	.0237	.0578	.0250	.0212	.0011	.0200
202.500		.1824	.0666	.0225	.0237	.0124	.0162	.0590	.0162	.0212	.0011	.0200
225.000	.4345	.1913	.0703	.0212	.0200	.0099	.0200	.0212	.0124	.0162	.0036	.0237
247.500		.2114	.0766	.0237	.0187	.0086	.0099	.0149	.0061	.0124	.0174	-.0076
270.000	.5061	.2379	.0880	.0263	9.9990	.0061	.0111	.0149	.0049	.0124	.0162	-.0114
292.500		.2556	.1019	.0263	.0338	.0137	.0124	.0162	.0061	.0124	.0225	-.0101
315.000	.6069	.2819	.1119	.0300	.0338	.0149	.0162	.0162	-.0001	.0149	.0414	-.0164
326.000									.0313	.0263	.0515	-.0190
346.000		.3323	.1459	.0452	.0515	.0074	.0187	.0187	.0212	.0464	.0342	-.0165
360.000	.5830	.2997	.1447	.0880	.0968	.0830	.0679	.0742	.0729	.0842	.0842	.0061

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A003) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN, XT
LREF = 324.0000 INCHES YMRP = .0000 IN, YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN, ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 10.220 PO = 28.007 P = 3.7860

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5158	.2629	.0232	-.1090	-.0663	-.0501	-.0338	-.0296	-.0081	.1532	.4042	-.1882
14.000		.2609	.0307	-.1039	-.0479	-.1513	-.0335	-.0222	.0088	.1674	.2755	-.2245
24.000									.0194	.1601	.2439	-.2285
45.000	.5843	.2289	.0205	-.1064	-.0754	-.0259	-.0626	-.0115	-.0701	.0376	.2502	-.2332
67.500		.2496	.0368	-.0930	-.0657	-.0021	-.0604	-.0127	-.0331	-.0354	.1406	-.1884
90.000	.5793	.2375	.0383	-.0952	9.9990	-.0369	-.0153	-.0297	-.0199	-.0225	.0217	-.1854
112.500		.2461	.0455	-.0963	-.0630	-.0403	-.0380	-.0225	-.0187	-.0259	.0198	-.1878
135.000	.5797	.2597	.0538	-.0982	-.0676	-.0521	-.0407	-.0229	9.9990	-.0244	-.0331	-.1534
157.500		.2553	.0554	-.0933	-.0668	-.0566	-.0434	-.0127	-.0138	-.0210	-.0271	-.1422
180.000	.5638	.2293	.0599	-.1003	-.0734	-.0305	-.0313	-.0101	-.0120	-.0165	-.0293	-.1443
202.500		.2490	.0576	-.0989	-.0705	-.0433	-.0384	-.0233	-.0199	-.0161	-.0214	-.1460
225.000	.5547	.2539	.0459	-.0928	-.0675	-.0361	-.0176	-.0221	-.0301	-.0214	-.0202	-.1503
247.500		.2558	.0413	-.0955	-.0660	-.0319	-.0127	-.0130	-.0221	-.0191	.0323	-.1980
270.000	.5699	.2633	.0421	-.1008	9.9990	-.0361	-.0043	-.0229	-.0198	-.0149	.0391	-.2007
292.500		.2550	.0368	-.1075	-.0569	-.0073	-.0353	-.0228	-.0342	-.0308	.1496	-.2001
315.000	.5786	.2644	.0440	-.1114	-.0587	-.0230	-.0636	-.0257	-.0424	.0068	.2184	-.2109
326.000									.0065	.0058	.2171	-.2104
346.000		.2836	.0417	-.0975	-.0733	-.1543	-.0256	-.0331	.0554	.1236	.2508	-.2024
360.000	.5158	.2629	.0232	-.1090	-.0663	-.0501	-.0338	-.0296	-.0081	.1532	.4042	-.1882

MACH (2) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8610 PO = 60.006 P = .80900

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4986	.2481	.0777	-.0153	.0067	-.0147	-.0215	-.0153	-.0040	.0512	.1587	-.0649
14.000		.2451	.0782	-.0142	.0089	-.0170	-.0243	-.0153	-.0080	.0500	.1683	-.0728
24.000									.0026	.0499	.1362	-.0807
45.000	.5341	.2389	.0737	-.0159	-.0012	-.0063	-.0164	-.0153	-.0181	.0015	.1013	-.0768
67.500		.2479	.0805	-.0142	-.0097	-.0119	-.0125	-.0119	-.0074	-.0113	.0370	-.0723
90.000	.5353	.2489	.0838	-.0131	9.9990	-.0136	-.0074	-.0097	-.0114	-.0069	.0049	-.0700
112.500		.2485	.0810	-.0136	-.0147	-.0153	-.0108	-.0091	-.0113	-.0074	.0133	-.0666
135.000	.5389	.2523	.0826	-.0136	-.0153	-.0170	-.0108	-.0091	9.9990	-.0080	-.0108	-.0632
157.500		.2517	.0804	-.0142	-.0170	-.0170	-.0131	-.0097	.0195	-.0074	-.0131	-.0604
180.000	.5305	.2371	.0793	-.0136	-.0159	-.0176	-.0120	-.0103	-.0086	-.0080	-.0136	-.0598
202.500		.2508	.0822	-.0136	-.0147	-.0175	-.0119	-.0097	-.0097	-.0053	-.0114	-.0616

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A003)

MACH (2) = 3.480 ALPHA (1) = -.280

SECTION (1)ANK DEPENDENT VARIABLE CP

X/L8	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5212	.2444	.0810	-.0131	-.0153	-.0153	-.0120	-.0103	-.0103	-.0052	-.0091	-.0632
247.500		.2506	.0810	-.0131	-.0148	-.0170	-.0114	-.0080	-.0091	-.0074	.0111	-.0740
270.000	.5341	.2512	.0815	-.0131	9.9990	-.0159	-.0086	-.0058	-.0120	-.0063	.0071	-.0768
292.500		.2409	.0787	-.0153	-.0035	-.0108	-.0029	-.0120	-.0080	-.0114	.0297	-.0788
315.000	.8437	.2444	.0781	-.0159	-.0041	-.0018	-.0165	-.0170	-.0138	-.0170	.0754	-.0779
326.000									.0218	.0122	.0895	-.0830
346.000		.2720	.0939	-.0052	.0094	-.0520	-.0187	-.0182	.0077	.0578	.1142	-.0790
360.000	.4986	.2481	.0777	-.0153	.0067	-.0147	-.0215	-.0153	-.0040	.0512	.1587	-.0649

MACH (3) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0700 PO = 90.019 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/L8	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4496	.2242	.1095	.0717	.0843	.0742	.0553	.0629	.0629	.0768	.0553	.0023
14.000		.2217	.0994	.0642	.0654	.0465	.0452	.0465	.0478	.0667	.1309	-.0026
24.000									.0175	.0301	.0855	-.0051
45.000	.4975	.2266	.0943	.0540	.0578	.0389	.0389	.0401	.0351	.0490	.0414	-.0076
67.500		.2316	.0981	.0439	.0477	.0338	.0414	.0364	.0376	.0401	.0124	-.0051
90.000	.5126	.2367	.0981	.0452	9.9990	.0338	.0376	.0376	.0326	.0389	.0074	-.0001
112.500		.2430	.0968	.0401	.0414	.0275	.0326	.0338	.0288	.0364	.0086	.0011
135.000	.5176	.2442	.0956	.0351	.0313	.0225	.0225	.0275	9.9990	.0288	.0023	-.0013
157.500		.2468	.1006	.0351	.0301	.0175	.0238	.0250	.1271	.0313	.0036	.0023
180.000	.5113	.2379	.0981	.0338	.0326	.0187	.0200	.0239	.0299	.0288	.0011	.0023
202.500		.2468	.0931	.0288	.0301	.0301	.0162	.0187	.0300	.0238	.0023	.0023
225.000	.5050	.2392	.0918	.0263	.0263	.0149	.0149	.0162	.0137	.0175	.0011	.0011
247.500		.2405	.1031	.0250	.0225	.0074	.0112	.0137	.0074	.0137	.0149	-.0013
270.000	.4962	.2354	.0868	.0212	9.9990	.0074	.0099	.0137	.0074	.0149	.0162	-.0076
292.500		.2291	.0842	.0175	.0301	.0112	.0124	.0124	.0074	.0112	.0250	-.0064
315.000	.5076	.2178	.0767	.0175	.0238	.0074	.0074	.0949	.0011	.0149	.0351	-.0114
326.000									.0200	.0187	.0399	-.0177
346.000		.2468	.0931	.0200	.0275	.0011	.0036	.0074	.0099	.0301	.0363	-.0127
360.000	.4496	.2242	.1095	.0717	.0843	.0742	.0553	.0629	.0629	.0768	.0553	.0023

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A004) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 3.790 BETA = .00000 Q(PSI) = 10.242 PO = 28.011 P = 3.8080

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4337	.1801	-.0065	-.1286	-.0796	-.0593	-.0329	-.0197	.0040	.1412	.3990	-.1763
14.000		.1743	-.0122	-.1346	-.0881	-.1603	-.0345	-.0205	.0020	.1467	.3015	-.2183
24.000									.0006	.1331	.2542	-.2168
45.000	.5129	.1717	-.0013	-.1343	-.0731	-.0168	-.0644	-.0190	-.0300	.0602	.1709	-.2144
67.500		.2110	.0100	-.1120	-.0882	-.0251	-.0557	-.0338	-.0311	-.0209	.1115	-.1970
90.000	.5763	.2450	.0311	-.0991	9.9990	-.0443	-.0232	-.0390	-.0300	-.0307	.0092	-.1785
112.500		.2791	.0561	-.0822	-.0561	-.0523	-.0504	-.0255	-.0395	-.0410	-.0091	-.2114
135.000	.6644	.3136	.0851	-.0666	-.0443	-.0496	-.0534	-.0341	9.9990	-.0311	-.0405	-.1745
157.500		.3230	.0996	-.0516	-.0353	-.0414	-.0391	-.0191	-.0126	-.0187	-.0232	-.1650
180.000	.6874	.3076	.1006	-.0455	-.0349	-.0160	-.0266	-.0126	-.0092	-.0100	-.0228	-.1720
202.500		.3256	.0953	-.0503	-.0398	-.0250	-.0356	-.0235	-.0156	-.0092	-.0208	-.1725
225.000	.6353	.3197	.0874	-.0639	-.0409	-.0360	-.0239	-.0288	-.0330	-.0247	-.0296	-.1713
247.500		.2912	.0640	-.0860	-.0482	-.0402	-.0289	-.0157	-.0353	-.0406	.0013	-.2038
270.000	.5752	.2617	.0428	-.1035	9.9990	-.0360	-.0182	-.0299	-.0341	-.0295	.0198	-.2002
292.500		.2258	.0160	-.1224	-.0797	-.0314	-.0303	-.0367	-.0341	-.0344	.1325	-.1828
315.000	.5296	.2031	-.0073	-.1257	-.0695	-.0129	-.0665	-.0314	-.0348	.0602	.1864	-.1924
326.000									-.0206	.0692	.1839	-.1959
346.000		.1918	-.0039	-.1302	-.1031	-.1551	-.0895	-.0321	.0455	.1194	.2510	-.1838
360.000	.4337	.1801	-.0065	-.1286	-.0796	-.0593	-.0329	-.0197	.0040	.1412	.3990	-.1763

MACH (2) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 6.8830 PO = 60.018 P = .81000

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3879	.1746	.0308	-.0345	-.0187	-.0266	-.0272	-.0193	-.0103	.0370	.1592	-.0644
14.000		.1727	.0324	-.0351	-.0188	-.0306	-.0312	-.0210	-.0114	.0428	.1452	-.0717
24.000									-.0030	.0471	.1084	-.0808
45.000	.4507	.1852	.0421	-.0339	-.0204	-.0176	-.0210	-.0193	-.0255	.0082	.0894	-.0773
67.500		.2134	.0601	-.0277	-.0249	-.0170	-.0221	-.0193	-.0159	-.0074	.0054	-.0740
90.000	.5268	.2427	.0798	-.0165	9.9990	-.0198	-.0153	-.0170	-.0176	-.0063	-.0068	-.0672
112.500		.2765	.1012	-.0052	-.0080	-.0176	-.0148	-.0165	-.0159	-.0097	.0020	-.0114
135.000	.6187	.3098	.1210	.0049	-.0007	-.0086	-.0074	-.0159	9.9990	-.0086	-.0091	-.0108
157.500		.3297	.1329	.0128	.0043	-.0029	-.0006	-.0153	.0246	-.0012	-.0053	-.0115
180.000	.6491	.3177	.1300	.0155	.0071	.0037	.0015	-.0001	-.0018	.0015	-.0029	-.0108
202.500		.3295	.1311	.0127	.0043	-.0007	-.0007	-.0018	-.0058	-.0007	-.0052	-.0108

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A004)

MACH (2) = 3.480 ALPHA (1) = 3.770

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6040	.3047	.1210	.0060	-.0012	-.0041	-.0074	-.0086	-.0114	-.0058	-.0107	-.0502
247.500		.2805	.1046	-.0029	-.0046	-.0159	-.0142	-.0131	-.0153	-.0091	-.0002	-.0672
270.000	.5392	.2510	.0842	-.0137	9.9990	-.0210	-.0182	-.0126	-.0176	-.0069	-.0029	-.0678
292.500		.2172	.0651	-.0255	-.0171	-.0148	-.0159	-.0120	-.0165	-.0081	.0014	-.0769
315.000	.4601	.1883	.0461	-.0350	-.0186	-.0153	-.0164	-.0124	-.0231	-.0057	.0804	-.0768
326.000									-.0053	-.0018	.0804	-.0734
346.000		.1969	.0516	-.0317	-.0182	-.0520	-.0295	-.0114	.0031	.0465	.1026	-.0762
360.000	.3879	.1745	.0308	-.0345	-.0187	-.0266	-.0272	-.0193	-.0103	.0370	.1592	-.0644

MACH (3) = 4.960 ALPHA (1) = 3.730 BETA = .00000 QIPSII = 3.0710 PO = 90.042 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3463	.1636	.0931	.0691	.0716	.0679	.0540	.0716	.0628	.0716	.0490	.0112
14.000		.1624	.0792	.0603	.0527	.0427	.0452	.0641	.0464	.0628	.0616	.0061
24.000									.0124	.0162	.0401	.0049
45.000	.4219	.1774	.0779	.0515	.0489	.0426	.0376	.0653	.0363	.0489	.0200	.0036
67.500		.2038	.0842	.0426	.0413	.0376	.0401	.0476	.0376	.0426	.0049	.0049
90.000	.5101	.2316	.0918	.0426	9.9990	.0300	.0351	.0426	.0288	.0375	.0011	.0074
112.500		.2658	.1132	.0452	.0401	.0288	.0313	.0426	.0300	.0376	.0124	.0212
135.000	.6033	.2971	.1245	.0489	.0363	.0275	.0300	.0414	9.9990	.0326	.0086	.0212
157.500		.3133	.1333	.0476	.0363	.0275	.0288	.0376	.1257	.0351	.0112	.0225
180.000	.6310	.3079	.1396	.0514	.0376	.0262	.0275	.0426	.0325	.0288	.0112	.0212
202.500		.3122	.1409	.0452	.0338	.0200	.0225	.0326	.0237	.0275	.0099	.0200
225.000	.5819	.2971	.1308	.0426	.0313	.0212	.0200	.0300	.0187	.0225	-.0001	.0212
247.500		.2706	.1132	.0338	.0225	.0124	.0124	.0237	.0099	.0137	.0124	.0086
270.000	.4950	.2366	.0930	.0225	9.9990	.0061	.0061	.0212	.0049	.0124	.0061	.0023
292.500		.2027	.0754	.0137	.0137	.0061	.0074	.0187	.0061	.0137	.0112	.0036
315.000	.4231	.1723	.0552	.0124	.0149	.0074	.0074	.0187	.0036	.0135	.0149	-.0026
326.000									.0124	.0137	.0149	-.0064
346.000		.1774	.0628	.0111	.0137	-.0039	.0036	.0174	.0074	.0212	.0376	-.0064
360.000	.3463	.1636	.0931	.0691	.0716	.0679	.0540	.0716	.0628	.0716	.0490	.0112

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A005) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 7.860 BETA = .00000 Q(PSI) = 10.214 PO = 28.000 P = 3.7810

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3275	.0995	-.0675	-.1670	-.1051	-.0470	-.0383	-.0280	-.0071	.1010	.4319	-.1828
14.000		.1036	-.0636	-.1683	-.1076	-.1456	-.0439	-.0318	-.0101	.0823	.3052	-.2039
24.000									-.0157	.1173	.2446	-.2094
45.000	.4149	.1088	-.0438	-.1613	-.1223	-.0275	-.0696	-.0461	-.0472	.0599	.1643	-.2033
67.500		.1556	-.0143	-.1406	-.1255	-.0777	-.0674	-.0742	-.0587	-.0173	.0822	-.2049
90.000	.5435	.2163	.0239	-.1164	9.9990	-.1084	-.0811	-.0811	-.0879	-.0811	-.0301	-.1978
112.500		.2908	.0744	-.0826	-.0538	-.0963	-.0933	-.0732	-.0747	-.0747	-.0663	-.1892
135.000	.7223	.3721	.1262	-.0540	-.0229	-.0529	-.0597	-.0513	9.9990	-.0510	-.0535	-.1881
157.500		.4227	.1594	-.0146	.0069	-.0271	-.0195	-.0157	-.0100	-.0150	-.0247	-.1970
180.000	.7882	.4201	.1682	-.0070	.0114	.0005	.0061	.0095	.0031	.0073	-.0070	-.2030
202.500		.4209	.1635	-.0180	-.0028	.0005	-.0210	-.0142	-.0104	-.0070	-.0108	-.2030
225.000	.7105	.3795	.1379	-.0377	-.0100	-.0229	-.0366	-.0373	-.0400	-.0335	-.0441	-.1944
247.500		.3111	.0871	-.0755	-.0414	-.0717	-.0721	-.0584	-.0630	-.0717	-.0538	-.2032
270.000	.5744	.2501	0383	-.1101	9.9990	-.0900	-.0828	-.0722	-.0798	-.0805	-.0433	-.2092
292.500		.1827	-.0164	-.1393	-.1143	-.0663	-.0614	-.0640	-.0610	-.0432	.0923	-.1909
315.000	.4489	.1344	-.0429	-.1526	-.1091	-.0391	-.0698	-.0480	-.0391	.0394	.1556	-.1946
326.000									-.0387	.0542	.1784	-.1951
346.000		.1198	-.0517	-.1544	-.1029	-.1305	-.0279	-.0279	.0316	.1179	.2545	-.1906
360.000	.3275	.0995	-.0675	-.1670	-.1051	-.0470	-.0383	-.0280	-.0071	.1010	.4319	-.1828

MACH (2) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(PSI) = 6.8640 PO = 60.031 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2931	.1127	.0021	-.0457	-.0322	-.0310	-.0299	-.0181	-.0186	.0129	.1825	-.0717
14.000		.1119	-.0002	-.0481	-.0362	-.0385	-.0357	-.0250	-.0233	.0076	.1113	-.0802
24.000									-.0170	.0166	.0747	-.0807
45.000	.3671	.1361	.0138	-.0458	-.0357	-.0340	-.0328	-.0345	-.0345	-.0210	.0183	-.0847
67.500		.1785	.0415	-.0368	-.0407	-.0356	-.0368	-.0368	-.0334	-.0294	-.0266	-.0745
90.000	.5113	.2341	.0735	-.0188	9.9990	-.0390	-.0390	-.0413	-.0374	-.0295	-.0272	-.0678
112.500		.3000	.1169	.0059	-.0013	-.0176	-.0227	-.0250	-.0328	-.0289	-.0125	-.0593
135.000	.6944	.3677	.1592	.0279	.0161	.0026	.0020	-.0013	9.9990	-.0058	-.0092	-.0576
157.500		.4155	.1896	.0482	.0352	.0211	.0200	.0178	.0442	.0155	.0138	-.0593
180.000	.7699	.4084	.1999	.0550	.0421	.0297	.0285	.0274	.0218	.0229	.0206	-.0616
202.500		.4122	.1890	.0476	.0335	.0257	.0211	.0206	.0133	.0183	.0149	-.0616

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A005)

MACH (2) = 3.480 ALPHA (1) = 7.800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6871	.3637	.1643	.0335	.0206	.0093	.0059	.0031	-.0058	-.0035	-.0041	-.0610
247.500		.3085	.1265	.0110	.0037	-.0120	-.0182	-.0199	-.0266	-.0266	-.0142	-.0638
270.000	.5299	.2471	.0865	-.0126	9.9990	-.0351	-.0368	-.0379	-.0368	-.0283	-.0216	-.0695
292.500		.1885	.0504	-.0334	-.0345	-.0334	-.0362	-.0362	-.0340	-.0295	-.0238	-.0790
315.000	.3827	.1446	.0211	-.0475	-.0379	-.0288	-.0312	-.0357	-.0357	-.0261	.0178	-.0847
326.000									-.0238	-.0188	.0578	-.0830
346.000		.1306	.0139	-.0514	-.0368	-.0508	-.0317	-.0356	-.0148	.0353	.1028	-.0869
360.000	.2931	.1127	.0021	-.0467	-.0322	-.0310	-.0299	-.0181	-.0186	.0129	.1825	-.0717

MACH (3) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(PSI) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2808	.1259	.0767	.0578	.0603	.0591	.0477	.0591	.0490	.0578	.0250	.0061
14.000		.1234	.0629	.0503	.0440	.0352	.0402	.0427	.0326	.0478	.0515	.0036
24.000									.0036	.0049	.0074	.0011
45.000	.3501	.1422	.0666	.0439	.0414	.0326	.0338	.0464	.0263	.0389	-.0026	-.0001
67.500		.1787	.0767	.0338	.0364	.0263	.0351	.0490	.0275	.0351	-.0051	-.0026
90.000	.4962	.2329	.0905	.0376	9.9990	.0250	.0263	.0477	.0187	.0275	-.0076	.0036
112.500		.2994	.1283	.0477	.0427	.0238	.0301	.0364	.0200	.0263	.0086	.0112
135.000	.6827	.3627	.1624	.0590	.0452	.0338	.0326	.0376	9.9990	.0313	.0149	.0112
157.500		.4093	.1901	.0691	.0527	.0389	.0401	.0414	.1422	.0401	.0250	.0112
180.000	.7696	.4080	.2014	.0754	.0565	.0439	.0427	.0452	.0414	.0389	.0313	.0137
202.500		.4143	.1976	.0704	.0553	.0351	.0376	.0376	.0313	.0364	.0275	.0149
225.000	.6701	.3627	.1737	.0565	.0439	.0275	.0288	.0275	.0200	.0212	.0162	.0149
247.500		.3060	.1309	.0389	.0250	.0149	.0112	.0175	.0023	.0099	.0099	.0036
270.000	.5063	.2405	.0956	.0225	9.9990	.0023	.0023	.0099	-.0001	.0061	.0074	-.0013
292.500		.1901	.0716	.0112	.0175	.0011	.0049	.0112	.0011	.0086	.0036	.0023
315.000	.3564	.1472	.0477	.0049	.0099	-.0026	.0023	.0099	-.0026	.0074	.0049	-.0026
326.000									.0023	.0049	.0061	-.0051
346.000		.1334	.0414	.0023	.0074	.0011	.0011	.0112	-.0013	.0124	.0187	-.0089
360.000	.2808	.1259	.0767	.0578	.0603	.0591	.0477	.0591	.0490	.0578	.0250	.0061

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A006) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 12.570 BETA = .00000 Q(PSI) = 10.202 PO = 28.001 P = 3.7680

DEPENDENT VARIABLE CP

SECTION (1)ANK X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8800	.8920	.9230	.9540
THETA												
.000	.2408	.0687	-.1025	-.1880	-.1097	-.0478	-.0505	-.0353	-.0337	.0839	.4053	-.2088
14.000		.0668	-.0949	-.1873	-.1193	-.1546	-.0604	-.0452	-.0402	.0152	.2898	-.2306
24.000									-.0340	.0853	.2359	-.2251
45.000	.3354	.0775	-.0862	-.1857	-.1359	-.0763	-.1055	-.0714	-.0736	-.0015	1230	-.2349
67.500		.1256	-.0428	-.1687	-.1596	-.1266	-.1353	-.1000	-.1073	-.0458	.0126	-.2128
90.000	.5097	.2115	.0145	-.1294	9.9990	-.1597	-.1722	-.1836	-.1711	-.1502	-.0433	-.2158
112.500		.3118	.1002	-.0581	-.0628	-.1095	-.1190	-.1239	-.1421	-.1391	-.1276	-.1890
135.000	.7831	.4198	.1827	-.0082	-.0074	-.0411	-.0358	-.0514	9.9990	-.0661	-.0609	-.1848
157.500		.4835	.2349	.0474	.0478	.0053	.0144	.0167	-.0044	-.0117	.0000	-.2031
180.000	.9026	.4872	.2465	.0694	.0633	.0520	.0459	.0398	.0209	.0216	.0118	-.2115
202.500		.4868	.2260	.0497	.0357	.0296	.0129	.0125	.0125	.0095	-.0055	-.2075
225.000	.7782	.4276	.1766	.0133	.0020	-.0100	-.0225	-.0426	-.0483	-.0441	-.0559	-.1965
247.500		.3207	.1047	-.0538	-.0477	-.0902	-.0932	-.1005	-.1187	-.1183	-.1125	-.2016
270.000	.5355	.2273	.0330	-.1114	9.9990	-.1501	-.1524	-.1683	-.1467	-.1410	-.0434	-.2280
292.500		.1421	-.0370	-.1537	-.1423	-.1135	-.1052	-.0987	-.0805	-.0248	.0387	-.2206
315.000	.3534	.0906	-.0710	-.1767	-.1328	-.0892	-.0979	-.0771	-.0695	.0008	.1597	-.2005
326.000									-.0689	.0568	.1372	-.2226
346.000		.0819	-.0909	-.1804	-.1186	-.1163	-.0408	-.0351	-.0143	.1108	.2445	-.2264
360.000	.2408	.0687	-.1025	-.1880	-.1097	-.0478	-.0505	-.0353	-.0337	.0839	.4053	-.2088

MACH (2) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(PSI) = 6.8640 PO = 60.032 P = .81000

DEPENDENT VARIABLE CP

SECTION (1)ANK X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8800	.8920	.9230	.9540
THETA												
.000	.2152	.0688	-.0162	-.0449	-.0348	-.0258	-.0258	-.0184	-.0201	-.0038	.1245	-.0754
14.000		.0700	-.0201	-.0466	-.0421	-.0410	-.0404	-.0365	-.0393	-.0229	.0783	-.0844
24.000									-.0416	-.0230	.0125	-.0883
45.000	.2924	.0958	-.0061	-.0500	-.0421	-.0450	-.0506	-.0500	-.0450	-.0337	-.0179	-.0889
67.500		.1488	.0248	-.0410	-.0466	-.0517	-.0512	-.0483	-.0490	-.0416	-.0393	-.0742
90.000	.4893	.2254	.0699	-.0179	9.9990	-.0500	-.0495	-.0579	-.0517	-.0461	-.0415	-.0742
112.500		.3205	.1307	.0175	.0057	-.0128	-.0185	-.0258	-.0337	-.0297	-.0145	-.0641
135.000	.7623	.4260	.1989	.0558	.0400	.0197	.0147	.0113	9.9990	.0090	.0107	-.0652
157.500		.4947	.2496	.0896	.0699	.0519	.0496	.0457	.0569	.0417	.0435	-.0697
180.000	.8874	.5068	.2695	.1032	.0846	.0694	.0666	.0621	.0576	.0587	.0552	-.0720
202.500		.5048	.2575	.0919	.0727	.0592	.0558	.0490	.0479	.0496	.0474	-.0720

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A006)

MACH (2) = 3.480 ALPHA (1) = 12.520

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.7599	.4327	.2136	.0654	.0490	.0304	.0288	.0209	.0169	.0180	.0181	-.0688
247.500		.3420	.1476	.0271	.0169	-.0033	-.0089	-.0157	-.0224	-.0235	-.0134	-.0658
270.000	.5167	.2479	.0868	-.0078	9.9990	-.0427	-.0478	-.0528	-.0523	-.0495	-.0393	-.0737
292.500		.1679	.0372	-.0371	-.0405	-.0433	-.0540	-.0562	-.0495	-.0450	-.0387	-.0742
315.000	.3178	.1134	.0046	-.0539	-.0438	-.0466	-.0528	-.0562	-.0500	-.0415	-.0106	-.0838
326.000									-.0477	-.0337	-.0089	-.0833
346.000		.0823	-.0117	-.0602	-.0455	-.0405	-.0309	-.0292	-.0241	.0118	.0801	-.0838
360.000	.2152	.0688	-.0162	-.0449	-.0348	-.0258	-.0258	-.0184	-.0201	-.0038	.1245	-.0754

MACH (3) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.021 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1976	.0981	.0704	.0603	.0679	.0692	.0528	.0603	.0528	.0553	.0452	.0011
14.000		.0893	.0527	.0527	.0464	.0401	.0427	.0364	.0364	.0401	.1019	-.0039
24.000									.0074	.0061	.0212	-.0064
45.000	.2745	.1069	.0515	.0439	.0427	.0427	.0364	.0313	.0288	.0326	-.0013	-.0114
67.500		.1498	.0679	.0389	.0389	.0314	.0377	.0263	.0301	.0301	-.0039	-.0064
90.000	.4748	.2178	.0880	.0439	9.9990	.0313	.0326	.0238	.0212	.0238	-.0076	-.0026
112.500		.3110	.1359	.0565	.0464	.0364	.0364	.0301	.0275	.0275	.0187	.0023
135.000	.7469	.4156	.2014	.0842	.0641	.0490	.0515	.0452	9.9990	.0427	.0364	-.0026
157.500		.4961	.2505	.1094	.0830	.0653	.0691	.0628	.1309	.0603	.0516	-.0026
180.000	.8817	.5025	.2694	.1220	.0956	.0805	.0779	.0742	.0767	.0729	.0729	-.0039
202.500		.4924	.2556	.1107	.0868	.0729	.0691	.0641	.0628	.0641	.0641	-.0039
225.000	.7507	.4231	.2153	.0880	.0653	.0527	.0477	.0427	.0401	.0389	.0414	-.0026
247.500		.3337	.1598	.0603	.0452	.0313	.0250	.0225	.0200	.0175	.0175	.0049
270.000	.4924	.2405	.1006	.0326	9.9990	.0086	.0099	.0074	-.0039	-.0001	.0011	.0036
292.500		.1687	.0616	.0149	.0187	.0112	.0061	.0061	.0023	.0023	.0036	.0011
315.000	.3009	.1132	.0351	.0086	.0112	-.0001	.0061	.0036	-.0013	.0011	.0023	-.0013
326.000									.0049	.0036	-.0026	-.0051
346.000		.0893	.0250	.0074	.0099	.0023	.0086	.0061	.0023	.0036	.0175	-.0051
360.000	.1976	.0981	.0704	.0603	.0679	.0692	.0528	.0603	.0528	.0553	.0452	.0011

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (RIA007) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 16.660 BETA = .00000 Q(PSI) = 10.269 PO = 28.012 P = 3.8380

SECTION (TANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1948	-.0012	-.1217	-.2035	-.1112	-.0961	-.0558	-.0147	-.0483	.0413	.3694	-.2149
14.000		.0059	-.1241	-.1983	-.1294	-.1686	-.0917	-.0739	-.0996	-.0623	.2111	-.2299
24.000									-.0922	.0145	.1838	-.2530
45.000	.2692	.0198	-.1192	-.2082	-.1758	-.1343	-.1765	-.1652	-.1988	-.0819	-.0076	-.2604
67.500		.0782	-.0839	-.1900	-.1998	-.2088	-.2040	-.1667	-.1475	-.1095	-.0444	-.2141
90.000	.4786	.1893	-.0049	-.1432	9.9990	-.2121	-.2193	-.2155	-.1632	-.1360	-.0650	-.2180
112.500		.3318	.1140	-.0592	-.0694	-.0973	-.1135	-.1285	-.1496	-.1444	-.1396	-.1983
135.000	.8579	.4911	.2330	.0296	.0262	-.0189	-.0098	-.0241	9.9990	-.0351	-.0356	-.2050
157.500		.5939	.3140	.1140	.1068	.0518	.0599	.0580	.0402	.0439	.0496	-.2052
180.000	1.0221	.6163	.3373	.1398	.1304	.1154	.1079	.1030	.0766	.0812	.0745	-.2280
202.500		.6039	.3105	.1102	.0850	.0839	.0631	.0631	.0639	.0586	.0435	-.2280
225.000	.8483	.5085	.2395	.0473	.0364	.0176	.0161	-.0125	-.0234	-.0185	-.0361	-.2237
247.500		.3519	.1253	-.0388	-.0449	-.0765	-.0871	-.1100	-.1304	-.1285	-.1272	-.2111
270.000	.5167	.2218	.0206	-.1184	9.9990	-.2031	-.2020	-.1992	-.1508	-.1432	-.0571	-.2348
292.500		.1072	-.0645	-.1767	-.1880	-.1718	-.1699	-.1473	-.1319	-.1014	-.0075	-.2413
315.000	.2904	.0398	-.1075	-.1961	-.1750	-.1388	-.1750	-.1531	-.1916	-.0815	.0398	-.2325
326.000									-.1003	-.0494	-.0015	-.2295
346.000		.0093	-.1185	-.2036	-.1298	-.1008	-.0474	-.0433	-.0440	.0981	.2052	-.2372
360.000	.1948	-.0012	-.1217	-.2035	-.1112	-.0961	-.0558	-.0147	-.0483	.0413	.3694	-.2149

MACH (2) = 3.480 ALPHA (1) = 16.560 BETA = .00000 Q(PSI) = 6.8650 PO = 60.040 P = .81000

SECTION (TANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1559	.0341	-.0334	-.0489	-.0424	-.0300	-.0357	-.0300	-.0379	-.0143	.0054	-.0756
14.000		.0330	-.0379	-.0486	-.0486	-.0559	-.0537	-.0486	-.0475	-.0306	.0358	-.0796
24.000									-.0480	-.0374	-.0098	-.0903
45.000	.2217	.0578	-.0266	-.0559	-.0492	-.0548	-.0582	-.0458	-.0509	-.0419	-.0335	-.0909
67.500		.1186	.0048	-.0486	-.0576	-.0593	-.0593	-.0458	-.0520	-.0497	-.0469	-.0774
90.000	.4626	.2155	.0640	-.0182	9.9990	-.0486	-.0514	-.0441	-.0576	-.0565	-.0520	-.9774
112.500		.3440	.1485	.0318	.0138	-.0075	-.0159	-.0165	-.0238	-.0238	-.0086	-.0683
135.000	.8345	.4902	.2422	.0877	.0657	.0437	.0426	.0364	9.9990	.0330	.0364	-.0728
157.500		.5936	.3248	.1406	.1164	.0904	.0916	.0916	.1045	.0954	.0870	-.0746
180.000	1.0169	.6122	.3513	.1626	.1350	.1209	.1152	.1152	.1085	.1093	.1072	-.0734
202.500		.6043	.3288	.1440	.1158	.1051	.0993	.0950	.0938	.0950	.0910	-.0757

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T) (R1A007)

MACH (2) = 3.480 ALPHA (1) = 16.560

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8372	.4995	.2662	.1034	.0797	.0611	.0561	.0504	.0454	.0471	.0431	-.0785
247.500		.3705	.1716	.0454	.0273	.0059	-.0007	-.0041	-.0109	-.0131	-.0069	-.0779
270.000	.4961	.2414	.0859	-.0064	9.9990	-.0435	-.0469	-.0509	-.0588	-.0599	-.0514	-.0762
292.500		.1423	.0234	-.0430	-.0486	-.0582	-.0717	-.0655	-.0610	-.0582	-.0537	-.0751
315.000	.2517	.0769	-.0165	-.0633	-.0576	-.0706	-.0700	-.0672	-.0627	-.0588	-.0459	-.0836
326.000									-.0577	-.0509	-.0419	-.0824
346.000		.0414	-.0345	-.0621	-.0543	-.0520	-.0481	-.0368	-.0385	-.0221	.0071	-.0762
360.000	.1559	.0341	-.0334	-.0469	-.0424	-.0300	-.0357	-.0300	-.0379	-.0143	.0054	-.0756

MACH (3) = 4.960 ALPHA (1) = 16.470 BETA = .00000 Q(PSI) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1397	.0805	.0628	.0590	.0641	.0679	.0527	.0527	.0515	.0540	.0238	-.0039
14.000		.0717	.0477	.0528	.0465	.0414	.0414	.0351	.0351	.0389	.0628	-.0076
24.000									.0023	.0011	-.0001	-.0089
45.000	.2140	.0855	.0515	.0452	.0439	.0351	.0326	.0313	.0288	.0313	-.0064	-.0127
67.500		.1296	.0553	.0364	.0351	.0338	.0351	.0250	.0289	.0263	-.0114	-.0114
90.000	.4559	.2127	.0842	.0452	9.9990	.0326	.0338	.0238	.0212	.0212	-.0127	-.0127
112.500		.3375	.1548	.0691	.0540	.0427	.0414	.0364	.0338	.0326	.0263	-.0051
135.000	.8187	.4723	.2379	.1069	.0830	.0641	.0666	.0615	9.9990	.0628	.0628	-.0076
157.500		.5768	.3186	.1498	.1183	.1006	.1044	.1031	.1750	.1057	.1107	-.0051
180.000	.9951	.6095	.3488	.1712	.1384	.1246	.1246	.1233	.1258	.1246	.1283	-.0064
202.500		.6046	.3453	.1598	.1271	.1132	.1082	.1082	.1120	.1132	.1107	-.0089
225.000	.8288	.5013	.2682	.1208	.0931	.0792	.0729	.0691	.0691	.0679	.0666	-.0101
247.500		.3665	.1800	.0716	.0515	.0351	.0313	.0288	.0263	.0225	.0238	-.0001
270.000	.4723	.2444	.1057	.0364	9.9990	.0150	.0125	.0099	.0049	.0024	.0036	-.0001
292.500		.1472	.0502	.0124	.0137	.0074	.0023	.0023	-.0013	-.0013	.0023	-.0026
315.000	.2291	.0805	.0250	.0074	.0086	-.0026	.0023	.0023	-.0039	-.0025	-.0001	-.0076
326.000									.0011	.0023	-.0039	-.0101
346.000		.0553	.0086	.0023	.0049	-.0001	-.0001	.0011	-.0026	.0011	.0200	-.0114
360.000	.1397	.0805	.0628	.0590	.0641	.0679	.0527	.0527	.0515	.0540	.0238	-.0039

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A008) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 20.740 BETA = .00000 Q(PSI) = 10.261 PO = 28.010 P = 3.8290

DEPENDENT VARIABLE CP

SECTION (1)ANK		.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
X/LB													
THETA													
.000	.1204	-.0374	-.1547	-.2140	-.1132	-.1657	-.0884	-.0487	-.1083	-.0861	.2469	-.2365	
14.000		-.0381	-.1542	-.2149	-.1535	-.1795	-.1569	-.1395	-.1309	-.1124	.2314	-.2668	
24.000									-.1077	.0062	.1592	-.2717	
45.000	.1688	-.0284	-.1604	-.2363	-.2212	-.2374	-.2178	-.1710	-.1933	-.0955	-.0474	-.2826	
67.500		.0221	-.1197	-.2187	-.2443	-.2176	-.2228	-.1950	-.1822	-.1359	-.0791	-.2402	
90.000	.4236	.1600	-.0272	-.1560	9.9990	-.2114	-.2227	-.2268	-.1914	-.1707	-.1018	-.2374	
112.500		.3480	.1209	-.0480	-.0563	-.0997	-.1080	-.1144	-.1400	-.1351	- 1326	-.2128	
135.000	.9136	.5545	.2678	.0669	.0699	.0130	.0078	.0066	9.9990	-.0015	.0017	-.2272	
157.500		.6956	.3940	.1689	.1715	.1094	.1128	.1177	.0955	.0985	.1135	-.2324	
180.000	1.1334	.7251	.4430	.1994	.2043	.1979	.1790	.1681	.1492	.1518	.1365	-.2472	
202.500		.6992	.4061	.1615	.1510	.1461	.1231	.1201	.1246	.1231	.1060	-.2507	
225.000	.9048	.5670	.3012	.0876	.0838	.0466	.0428	.0255	.0172	.0206	.0010	-.2446	
247.500		.3785	.1470	-.0228	-.0307	-.0703	-.0718	-.0959	-.1145	-.1202	-.1187	-.2399	
270.000	.4785	.1963	.0040	-.1294	9.9990	-.2010	-.2048	-.2135	-.1924	-.1916	-.1355	-.2656	
292.500		.0515	-.1013	-.2032	-.2183	-.2029	-.1964	-.1787	-.1749	-.1568	-.0783	-.2513	
315.000	.1961	-.0212	-.1471	-.2262	-.2191	-.2432	-.2357	-.1746	-.2225	-.1218	-.0154	-.2416	
326.000									-.1686	-.1185	-.0380	-.2447	
346.000		-.0387	-.1528	-.2162	-.1275	-.1645	-.0765	-.0889	-.1165	.0107	.0828	-.2544	
350.000	.1204	-.0374	-.1547	-.2140	-.1132	-.1657	-.0884	-.0487	-.1083	-.0861	.2469	-.2365	

MACH (2) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PSI) = 6.8640 PO = 60.035 P = .81000

DEPENDENT VARIABLE CP

SECTION (1)ANK		.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
X/LB													
THETA													
.000	.1051	.0083	-.0362	-.0480	-.0418	-.0384	-.0418	-.0412	-.0446	-.0266	-.0002	-.0751	
14.000		.0049	-.0418	-.0492	-.0508	-.0559	-.0587	-.0570	-.0525	-.0390	.0211	-.0824	
24.000									-.0588	-.0475	-.0238	-.0898	
45.000	.1592	.0228	-.0374	-.0565	-.0503	-.0644	-.0599	-.0599	-.0548	-.0497	-.0452	-.0881	
67.500		.0888	-.0064	-.0526	-.0616	-.0610	-.0616	-.0627	-.0548	-.0548	-.0548	-.0774	
90.000	.4336	.2033	.0584	-.0198	9.9990	-.0492	-.0531	-.0587	-.0604	-.0604	-.0588	-.0802	
112.500		.3648	.1688	.0465	.0262	.0014	-.0035	-.0075	-.0109	-.0109	.0037	-.0751	
135.000	.9018	.5544	.2951	.1249	.1018	.0770	.0748	.0585	9.9990	.0714	.0719	-.0796	
157.500		.6978	.4071	.1986	.1733	.1445	.1457	.1479	.1597	.1451	.1462	-.0723	
180.000	1.1452	.7282	.4499	.2319	.2026	.1879	.1834	.1823	.1783	.1795	.1744	-.0699	
202.500		.7138	.4184	.2048	.1738	.1643	.1552	.1519	.1564	.1569	.1513	-.0706	

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A008)

MACH (2) = 3.480 ALPHA (1) = 20.610

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.9108	.5688	.3248	.1451	.1181	.0955	.0933	.0848	.0931	.0871	.0809	-.0785
247.500		.3953	.1986	.0640	.0428	.0172	.0133	.0093	.0054	.0042	.0087	-.0774
270.000	.4719	.2324	.0865	-.0047	9.9990	-.0402	-.0481	-.0514	-.0559	-.0565	-.0492	-.0774
292.500		.1147	.0099	-.0509	-.0543	-.0599	-.0785	-.0728	-.0655	-.0638	-.0599	-.0785
315.000	.1947	.0454	-.0323	-.0706	-.0616	-.0795	-.0745	-.0745	-.0672	-.0650	-.0576	-.0802
326.000									-.0627	-.0605	-.0537	-.0869
346.000		.0026	-.0492	-.0706	-.0571	-.0723	-.0610	-.0559	-.0559	-.0317	.0133	-.0779
360.000	.1051	.0083	-.0362	-.0480	-.0418	-.0384	-.0418	-.0412	-.0446	-.0266	-.0063	-.0751

MACH (3) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(PSI) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1006	.0716	.0628	.0590	.0628	.0653	.0490	.0527	.0502	.0553	.0036	-.0051
14.000		.0641	.0502	.0527	.0464	.0401	.0376	.0351	.0351	.0401	.0553	-.0076
24.000									-.0001	-.0001	.0011	-.0101
45.000	.1624	.0729	.0477	.0427	.0427	.0389	.0326	.0301	.0288	.0326	-.0076	-.0114
67.500		.1120	.0540	.0326	.0338	.0288	.0339	.0225	.0288	.0225	-.0089	-.0101
90.000	.4332	.2127	.0956	.0464	9.9990	.0269	.0325	.0263	.0250	.0238	-.0064	-.0089
112.500		.3652	.1813	.0792	.0653	.0439	.0477	.0452	.0452	.0452	.0427	-.0051
135.000	.8943	.5441	.2946	.1372	.1132	.0931	.0994	.0959	9.9990	.1031	.1044	-.0076
157.500		.6833	.3983	.2004	.1714	.1537	.1588	.1651	.2558	.1739	.1800	-.0026
180.000	1.1312	.7217	.4483	.2342	.2014	.1863	.1938	.2001	.2115	.2090	.2090	-.0039
202.500		.7041	.4231	.2140	.1800	.1661	.1697	.1737	.1825	.1825	.1838	-.0026
225.000	.8805	.5718	.3337	.1598	.1321	.1132	.1107	.1132	.1132	.1157	.1132	-.0051
247.500		.3954	.2077	.0880	.0704	.0515	.0452	.0477	.0439	.0427	.0439	-.0039
270.000	.4420	.2405	.1107	.0364	9.9990	.0162	.0099	.0137	.0074	.0049	.0099	-.0026
292.500		.1309	.0527	.0099	.0225	.0049	.0036	.0023	.0011	-.0013	.0049	-.0051
315.000	.1850	.0691	.0175	.0023	.0112	-.0001	.0011	.0011	-.0039	.0036	-.0026	-.0051
326.000									-.0001	-.0026	-.0013	-.0051
346.000		.0338	.0124	.0023	.0074	.0049	.0011	.0011	-.0001	.0023	.0124	-.0127
360.000	.1006	.0716	.0628	.0590	.0628	.0653	.0490	.0527	.0502	.0553	.0036	-.0051

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A009) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = .000

MACH (1) = 1.980 ALPHA (1) = 24.850 BETA = .00000 Q(PSI) = 10.257 PO = 28.007 P = 3.8250

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0756	-.0795	-.1737	-.2299	-.1097	-.2363	-.1233	-.1150	-.1349	-.0694	.1571	-.2346
14.000		-.0813	-.1688	-.2323	-.1836	-.2217	-.1836	-.1972	-.1541	-.1375	.1556	-.2702
24.000									-.1516	-.0382	.1356	-.2751
45.000	.0809	-.0920	-.2018	-.2627	-.2631	-.2461	-.2273	-.1949	-.2031	-.1297	-.0865	-.2827
67.500		-.0275	-.1628	-.2446	-.2702	-.2227	-.2242	-.2129	-.1922	-.1923	-.1072	-.2435
90.000	.3703	.1329	-.0479	-.1618	9.9990	-.2093	-.2243	-.2357	-.1949	-.1799	-.1323	-.2446
112.500		.3555	.1266	-.0336	-.0416	-.0944	-.1083	-.1076	-.1298	-.1245	-.1170	-.2218
135.000	.9620	.6127	.3246	.1153	.1164	.0572	.0477	.0477	9.9990	.0383	.0458	-.2294
157.500		.7918	.4838	.2422	.2445	.1830	.1800	.1846	.1646	.1657	.1749	-.2450
180.000	1.2457	.8433	.5465	.2877	.3016	.2813	.2590	.2496	.2296	.2304	.2190	-.2435
202.500		.8029	.4913	.2405	.2363	.2190	.1978	.1877	.1941	.1948	.1787	-.2487
225.000	.9669	.6316	.3559	.1394	.1484	.0915	.0941	.0670	.0605	.0719	.0496	-.2600
247.500		.3956	.1636	-.0046	-.0110	-.0680	-.0744	-.0831	-.0944	-.1001	-.0992	-.2459
270.000	.4325	.1749	-.0042	-.1314	9.9990	-.1926	-.1994	-.2175	-.2164	-.2024	-.1510	-.2664
292.500		.0051	-.1339	-.2286	-.2379	-.2066	-.2047	-.2074	-.2014	-.1678	-.1118	-.2740
315.000	.0986	-.0620	-.1804	-.2529	-.2525	-.2601	-.2133	-.1970	-.2197	-.1386	-.0623	-.2676
326.000									-.1789	-.1204	-.0593	-.2585
346.000		-.0755	-.1782	-.2231	-.1174	-.2340	-.1238	-.1491	-.1393	-.0012	.0635	-.2525
360.000	.0756	-.0795	-.1737	-.2299	-.1097	-.2363	-.1233	-.1150	-.1349	-.0694	.1571	-.2346

MACH (2) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.8620 PO = 60.015 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0574	-.0113	-.0469	-.0559	-.0491	-.0553	-.0548	-.0581	-.0565	-.0418	.0043	-.0802
14.000		-.0148	-.0537	-.0565	-.0593	-.0666	-.0638	-.0655	-.0661	-.0475	.0308	-.0852
24.000									-.0689	-.0514	-.0187	-.0903
45.000	.1052	-.0058	-.0526	-.0621	-.0599	-.0695	-.0667	-.0661	-.0650	-.0537	-.0503	-.0886
67.500		.0623	-.0204	-.0604	-.0649	-.0717	-.0678	-.0678	-.0627	-.0565	-.0615	-.0807
90.000	.4011	.1909	.0533	-.0227	9.9990	-.0548	-.0548	-.0587	-.0621	-.0570	-.0576	-.0841
112.500		.3831	.1858	.0601	.0387	.0105	.0099	.0082	.0032	.0094	.0201	-.0802
135.000	.9665	.6176	.3487	.1627	.1384	.1120	.1136	.1114	9.9990	.1204	.1182	-.0756
157.500		.8013	.4936	.2613	.2360	.2044	.2134	.2174	.2168	.2190	.2157	-.0649
180.000	1.2686	.8368	.5539	.3087	.2788	.2703	.2670	.2703	.2596	.2691	.2563	-.0587
202.500		.8261	.5127	.2732	.2405	.2320	.2247	.2258	.2303	.2348	.2226	-.0627

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A009)

MACH (2) = 3.480 ALPHA (1) = 24.660

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8687	.6373	.3859	.1880	.1621	.1384	.1390	.1322	.1300	.1413	.1283	-.0723
247.500		.4186	.2174	.0804	.0573	.0330	.0308	.0291	.0257	.0251	.0285	-.0802
270.000	.4389	.2229	.0837	-.0058	9.9990	-.0458	-.0497	-.0452	-.0554	-.0503	-.0435	-.0875
292.500		.0894	-.0041	-.0570	-.0508	-.0711	-.0835	-.0762	-.0734	-.0661	-.0723	-.0824
315.000	.1424	.0161	-.0475	-.0796	-.0723	-.0835	-.0835	-.0779	-.0751	-.0689	-.0638	-.0796
326.000									-.0717	-.0678	-.0604	-.0925
346.000		-.0215	-.0610	-.0779	-.0610	-.0796	-.0694	-.0779	-.0706	-.0480	-.0007	-.0920
360.000	.0674	-.0113	-.0469	-.0559	-.0491	-.0553	-.0548	-.0581	-.0565	-.0418	.0043	-.0802

MACH (3) = 4.960 ALPHA (1) = 24.610 BETA = .00000 Q(PSI) = 3.0700 PO = 90.019 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0729	.0667	.0654	.0579	.0629	.0591	.0478	.0516	.0465	.0503	-.0051	-.0064
14.000		.0578	.0440	.0503	.0415	.0427	.0364	.0440	.0301	.0377	.0376	-.0076
24.000									-.0001	-.0013	-.0001	-.0089
45.000	.1233	.0590	.0427	.0401	.0389	.0376	.0301	.0452	.0250	.0275	-.0076	-.0127
67.500		.0981	.0489	.0326	.0338	.0326	.0338	.0275	.0263	.0250	-.0127	-.0101
90.000	.4105	.2064	.0880	.0452	9.9990	.0301	.0326	.0275	.0225	.0225	-.0026	-.0101
112.500		.3904	.2014	.0943	.0767	.0565	.0616	.0616	.0578	.0578	.0641	-.0001
135.000	.9750	.6222	.3501	.1775	.1485	.1384	.1422	.1460	9.9990	.1561	.1598	-.0001
157.500		.8074	.4975	.2694	.2367	.2316	.2405	.2556	.3413	.2631	.2669	.0049
180.000	1.3013	.8691	.5517	.3148	.2770	.2808	.2946	.3135	.3098	.3098	.3110	.0074
202.500		.8351	.5202	.2909	.2493	.2531	.2556	.2682	.2644	.2770	.2720	.0049
225.000	.9850	.6499	.3954	.2064	.1750	.1649	.1649	.1712	.1712	.1750	.1724	.0011
247.500		.4269	.2405	.1107	.0905	.0742	.0704	.0754	.0691	.0691	.0679	.0049
270.000	.4383	.2367	.1132	.0401	9.9990	.0175	.0137	.0200	.0099	.0086	.0162	-.0039
292.500		.1132	.0477	.0085	.0200	.0086	.0023	.0061	.0011	.0011	.0049	.0023
315.000	.1498	.0515	.0099	.0023	.0049	-.0001	-.0001	.0023	-.0064	-.0039	.0023	-.0026
326.000									-.0001	-.0001	-.0001	-.0064
346.000		.0212	.0112	.0036	.0061	-.0039	-.0001	.0023	-.0026	-.0001	.0086	-.0101
360.000	.0729	.0667	.0654	.0579	.0629	.0591	.0478	.0516	.0465	.0503	-.0051	-.0064

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A010) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 28.950 BETA = .00000 Q(PSI) = 10.253 PO = 28.008 P = 3.8210

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0142	-.1038	-.1955	-.2382	-.1186	-.2785	-.1895	-.1525	-.1540	-.0937	.0896	-.2435
14.000		-.1033	-.1958	-.2560	-.2548	-.2839	-.2375	-.2220	-.1810	-.1685	.0681	-.2773
24.000									-.1820	-.0962	.0628	-.2747
45.000	-.0185	-.1494	-.2328	-.2912	-.2923	-.2622	-.2279	-.2079	-.2165	-.1445	-.0970	-.2856
67.500		-.0796	-.1916	-.2658	-.2854	-.2221	-.2270	-.2187	-.2145	-.1799	-.1273	-.2398
90.000	.3266	.1080	-.0622	-.1681	9.9990	-.2273	-.2337	-.2379	-.2141	-.1972	-.1631	-.2492
112.500		.3667	.1431	-.0136	-.0234	-.0811	-.0932	-.0872	-.1109	-.1038	-.0963	-.2261
135.000	1.0058	.6665	.3848	.1624	.1676	.1050	.0971	.0949	9.9990	.0903	.0956	-.2479
157.500		.8919	.5858	.3167	.3404	.2598	.2628	.2673	.2474	.2466	.2522	-.2272
180.000	1.3483	.9680	.6675	.3893	.4154	.3761	.3569	.3523	.3316	.3320	.3140	-.2192
202.500		.9077	.5950	.3340	.3253	.3057	.2778	.2733	.2816	.2801	.2629	-.2247
225.000	1.0211	.6956	.4269	.1990	.2017	.1477	.1477	.1213	.1157	.1273	.1036	-.2526
247.500		.4079	.1897	.0172	.0009	-.0488	-.0541	-.0624	-.0734	-.0768	-.0774	-.2593
270.000	.3687	.1550	-.0137	-.1387	9.9990	-.1998	-.2161	-.2206	-.2157	-.2119	-.1709	-.2716
292.500		-.0357	-.1615	-.2454	-.2447	-.2080	-.2148	-.2159	-.2095	-.1846	-.1272	-.2849
315.000	.0432	-.1197	-.2238	-.2801	-.2759	-.2585	-.2291	-.2144	-.2269	-.1589	-.0687	-.2902
326.000									-.2019	-.1438	-.0681	-.2791
346.000		-.1173	-.1938	-.2347	-.1937	-.2707	-.1640	-.1897	-.1648	-.0208	.0406	-.2643
360.000	.0142	-.1038	-.1955	-.2382	-.1186	-.2785	-.1895	-.1525	-.1540	-.0937	.0896	-.2435

MACH (2) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(PSI) = 6.8600 PO = 59.997 P = .80900

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0342	-.0286	-.0529	-.0620	-.0558	-.0620	-.0631	-.0614	-.0608	-.0529	-.0125	-.0802
14.000		-.0315	-.0597	-.0637	-.0677	-.0699	-.0665	-.0631	-.0626	-.0518	.0381	-.0847
24.000									-.0678	-.0531	-.0198	-.0909
45.000	.0601	-.0282	-.0603	-.0694	-.0665	-.0660	-.0688	-.0620	-.0603	-.0564	-.0531	-.0880
67.500		.0394	-.0299	-.0637	-.0688	-.0677	-.0700	-.0615	-.0592	-.0604	-.0627	-.0830
90.000	.3690	.1810	.0535	-.0186	9.9990	-.0497	-.0497	-.0609	-.0536	-.0530	-.0452	-.0880
112.500		.4030	.2085	.0816	.0568	.0354	.0342	.0354	.0320	.0354	.0477	-.0706
135.000	1.0302	.6835	.4113	.2117	.1886	.1651	.1728	.1700	9.9990	.1785	.1785	-.0621
157.500		.9146	5978	.3447	.3171	.2946	.3042	.3132	.3194	.3087	.3059	-.0475
180.000	1.3949	.9814	.6734	.4045	.3747	.3792	.3781	.3826	.3674	.3708	.3571	-.0401
202.500		.9456	.6176	.3571	.3233	.3307	.3199	.3228	.3290	.3278	.3149	-.0441

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A010)

MACH (2) = 3.480 ALPHA (1) = 28.700

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.0397	.7089	.4547	.2450	.2145	.2027	.2027	.1954	.1937	.2021	.1892	-.0576
247.500		.4423	.2478	.1069	.0804	.0618	.0601	.0612	.0567	.0545	.0578	-.0694
270.000	.4169	.2162	.0911	.0026	9.9990	-.0373	-.0390	-.0362	-.0413	-.0413	-.0289	-.0818
292.500		.0669	-.0108	-.0599	-.0503	-.0593	-.0813	-.0773	-.0751	-.0740	-.0734	-.0773
315.000	.0996	-.0086	-.0604	-.0824	-.0756	-.0756	-.0802	-.0796	-.0773	-.0751	-.0711	-.0790
326.000									-.0751	-.0734	-.0694	-.0830
346.000		-.0356	-.0655	-.0779	-.0649	-.0880	-.0773	-.0773	-.0751	-.0672	-.0345	-.0824
360.000	.0342	-.0286	-.0529	-.0620	-.0558	-.0620	-.0631	-.0614	-.0608	-.0529	-.0125	-.0802

MACH (3) = 4.950 ALPHA (1) = 28.540 BETA = .00000 Q(PSI) = 3.0710 PO = 90.040 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0527	.0691	.0691	.0578	.0628	.0565	.0477	.0691	.0439	.0565	-.0139	-.0051
14.000		.0578	.0477	.0502	.0401	.0301	.0376	.0376	.0275	.0452	.0301	-.0076
24.000									-.0051	-.0051	-.0127	-.0139
45.000	.0855	.0553	.0452	.0389	.0401	.0263	.0288	.0301	.0225	.0364	-.0152	-.0139
67.500		.0855	.0426	.0288	.0275	.0174	.0313	.0212	.0187	.0288	-.0190	-.0089
90.000	.3827	.2001	.0867	.0439	9.9990	.0237	.0326	.0300	.0200	.0313	-.0039	-.0089
112.500		.4054	.2139	.1018	.0804	.0590	.0729	.0703	.0691	.0817	.0855	-.0001
135.000	1.0278	.6787	.4016	.2139	.1837	.1787	.1976	.1976	9.9990	.2152	.2115	.0023
157.500		.9256	.5893	.3374	.3021	.3084	.3323	.3449	.3739	.3512	.3474	.0011
180.000	1.4130	.9949	.6699	.3978	.3688	.3877	.4054	.4104	.4065	.4205	.4065	.0023
202.500		.9508	.6195	.3553	.3147	.3348	.3525	.3600	.3563	.3701	.3575	.0051
225.000	1.0326	.7165	.4583	.2492	.2152	.2114	.2215	.2290	.2253	.2391	.2241	.0074
247.500		.4419	.2542	.1232	.0981	.0842	.0890	.0930	.0855	.0943	.0892	-.0089
270.000	.4105	.2316	.1132	.0401	9.9990	.0086	.0149	.0200	.0099	.0174	.0212	-.0202
292.500		.0955	.0338	.0023	.0086	-.0102	-.0026	-.0026	-.0139	-.0051	-.0039	-.0240
315.000	.1119	.0376	.0074	-.0051	.0011	-.0177	-.0051	-.0051	-.0164	-.0064	-.0102	-.0202
326.000									-.0114	-.0102	-.0076	-.0240
346.000		.0149	.0049	-.0051	.0011	-.0190	-.0064	-.0026	-.0152	-.0039	-.0101	-.0202
360.000	.0527	.0691	.0691	.0578	.0628	.0565	.0477	.0691	.0439	.0565	-.0139	-.0051

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A011) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = -8.380 BETA = .00000 Q(PSI) = 10.235 PO = 28.008 P = 3.8010

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4934	.2431	.0436	-.1017	-.0755	-.1683	-.0687	-.0449	-.0169	.1549	.3485	-.1978
14.000		.2851	.0675	-.0806	-.0446	-.1007	-.0924	-.0495	-.0359	.1058	.2186	-.2174
24.000									-.0111	.0924	.1790	-.2347
45.000	.7144	.3660	.1160	-.0559	.0190	.0205	-.0119	-.0263	-.0608	.0118	.2766	-.2580
67.500		.4246	.1609	-.0354	.0107	.0069	.0043	-.0191	.0198	-.0316	.1713	-.2208
90.000	.7912	.4311	.1642	-.0179	9.9990	.0107	.0251	-.0179	-.0175	-.0047	.0175	-.2528
112.500		.4130	.1530	-.0161	-.0044	-.0028	-.0214	-.0256	-.0293	-.0256	.0428	-.2126
135.000	.7183	.3729	.1298	-.0391	-.0327	-.0508	-.0542	-.0535	9.9990	-.0610	-.0583	-.1853
157.500		.2957	.0826	-.0740	-.0630	-.0781	-.0838	-.0804	-.0927	-.0800	-.0774	-.1691
180.000	.5465	.2248	.0292	-.1062	-.1032	-.0945	-.1047	-.0809	-.0847	-.0809	-.0828	-.1617
202.500		.1895	-.0107	-.1324	-.1237	-.0973	-.1014	-.0618	-.0599	-.0542	-.0577	-.1662
225.000	.4351	.1521	-.0307	-.1509	-.1290	-.0708	-.0398	-.0428	-.0428	-.0398	-.0417	-.1667
247.500		.1229	-.0432	-.1641	-.1157	-.0462	-.0171	-.0205	-.0258	-.0300	.0194	-.1978
270.000	.4178	.1161	-.0541	-.1633	9.9990	-.0186	-.0269	-.0145	-.0111	-.0039	.0149	-.2072
292.500		.1187	-.0537	-.1646	-.0982	-.0185	-.0348	-.0216	-.0133	-.0514	.1473	-.2057
315.000	.4703	.1466	-.0337	-.1609	-.1175	-.1122	-.0760	-.0862	-.0760	.0379	.1776	-.2168
326.000									-.0563	.0693	.1502	-.2332
346.000		.2370	.0500	-.0969	-.0666	-.0587	-.0553	-.0322	.0251	.1467	.2627	-.2090
350.000	.4934	.2431	.0436	-.1017	-.0755	-.1683	-.0687	-.0449	-.0169	.1549	.3485	-.1978

MACH (2) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8640 PO = 60.032 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4995	.2237	.0743	-.0102	.0134	-.0164	-.0147	-.0130	-.0074	.0433	.0983	-.0723
14.000		.2822	.1035	.0015	.0111	-.0086	-.0198	-.0125	.0111	.0364	.1366	-.0824
24.000									.0149	.0318	.0731	-.0847
45.000	.7012	.3648	.1575	.0318	.0335	.0279	.0279	.0195	.0099	.0082	.0835	-.0875
67.500		.4169	.1914	.0516	.0375	.0364	.0308	.0319	.0325	.0297	.0826	-.0813
90.000	.7821	.4302	.2003	.0572	9.9990	.0358	.0341	.0285	.0262	.0279	.0392	-.0802
112.500		.4122	.1890	.0516	.0364	.0279	.0234	.0290	.0178	.0166	.0465	-.0595
135.000	.6920	.3705	.1603	.0324	.0179	.0042	.0048	.0026	9.9990	-.0054	-.0035	-.0700
157.500		.3023	.1220	.0110	-.0024	-.0154	-.0165	-.0193	-.0092	-.0272	-.0283	-.0666
180.000	.5048	.2268	.0797	-.0126	-.0233	-.0328	-.0368	-.0358	-.0402	-.0424	-.0458	-.0649
202.500		.1857	.0437	-.0323	-.0390	-.0390	-.0351	-.0340	-.0385	-.0402	-.0430	-.0661

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A011)

MACH (2) = 3.480 ALPHA (1) = -8.360

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.3667	.1434	.0211	-.0435	-.0441	-.0328	-.0334	-.0345	-.0385	-.0385	-.0402	-.0706
247.500		.1215	.0060	-.0503	-.0430	-.0311	-.0328	-.0407	-.0249	-.0244	.0031	-.0723
270.000	.3237	.1135	.0020	-.0514	9.9990	-.0210	-.0148	-.0114	-.0131	-.0137	-.0035	-.0740
292.500		.1203	.0042	-.0526	-.0306	-.0182	-.0312	-.0176	-.0182	-.0159	.0094	-.0723
315.000	.3947	.1485	.0189	-.0475	-.0385	-.0486	-.0650	-.0543	-.0509	-.0210	.0043	-.0723
326.000									-.0345	-.0153	.0360	-.0723
346.000		.2144	.0741	-.0120	.0048	-.0238	-.0148	-.0221	-.0109	.0504	.1299	-.0813
360.000	.4995	.2237	.0743	-.0102	.0134	-.0164	-.0147	-.0130	-.0074	.0433	.0983	-.0723

MACH (3) = 4.960 ALPHA (1) = -8.310 BETA = .00000 Q(PSI) = 3.0710 PO = 90.052 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4885	.1876	.1094	.0716	.0716	.0742	.0590	.0641	.0603	.0628	.0892	-.0039
14.000		.1876	.1170	.0691	.0540	.0553	.0515	.0515	.0477	.0515	.1258	-.0013
24.000									.0174	.0225	.0691	-.0127
45.000	.6636	.3424	.1547	.0754	.0628	.0615	.0565	.0540	.0590	.0603	.0615	-.0127
67.500		.3890	.1824	.0779	.0615	.0640	.0603	.0565	.0565	.0590	.0552	-.0152
90.000	.7341	.4003	.1862	.0804	9.9990	.0552	.0590	.0565	.0477	.0489	.0489	-.0089
112.500		.3865	.1774	.0729	.0540	.0502	.0477	.0590	.0426	.0426	.0515	.0023
135.000	.6535	.3500	.1547	.0615	.0426	.0376	.0376	.0590	9.9990	.0288	.0225	.0036
157.500		.2920	.1245	.0464	.0338	.0326	.0288	.0527	.0842	.0225	.0074	.0036
180.000	.4822	.2227	.0880	.0326	.0187	.0212	.0174	.0200	.0212	.0061	.0011	.0036
202.500		.1837	.0640	.0225	.0149	.0061	.0137	.0137	.0162	.0099	.0023	.0023
225.000	.3563	.1459	.0464	.0162	.0099	.0275	.0137	.0137	.0099	.0049	.0036	.0011
247.500		.1283	.0389	.0174	.0099	.0111	.0124	.0137	.0074	.0061	.0049	.0011
270.000	.3147	.1245	.0313	.0086	9.9990	.0086	.0086	.0124	.0086	.0023	.0086	.0011
292.500		.1232	.0300	.0049	.0124	.0124	.0111	.0111	.0061	.0011	.0099	.0011
315.000	.3752	.1484	.0414	.0099	.0086	.0011	.0036	.0074	.0023	.0023	-.0026	-.0039
326.000									.0049	.0049	-.0039	-.0102
346.000		.2136	.0714	.0211	.0211	.0136	.0136	.0136	.0136	.0211	.0363	-.0114
360.000	.4885	.1876	.1094	.0716	.0716	.0742	.0590	.0641	.0603	.0628	.0892	-.0039

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A012) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.980 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 10.216 PO = 28.002 P = 3.7820

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4995	.2551	.0432	-.0982	-.0581	-.0762	-.0486	-.0308	-.0089	.1662	.3379	-.1861
14.000		.2865	.0561	-.0906	-.0611	-.1477	-.0516	-.0297	-.0127	.1446	.2912	-.2125
24.000									.0023	.1192	.2360	-.2434
45.000	.8317	.3089	.0731	-.0880	-.0202	-.0002	-.0479	-.0225	-.0604	.0663	.1997	-.2423
67.500		.3408	.0947	-.0744	-.0282	.0035	-.0252	-.0373	-.0089	-.0418	.1578	-.1987
90.000	.6632	.3376	.0864	-.0641	9.9990	-.0206	.0092	-.0418	-.0285	-.0187	.0031	-.2099
112.500		.3304	.0840	-.0631	-.0405	-.0262	-.0322	-.0322	-.0390	-.0337	.0247	-.1895
135.000	.6399	.3139	.0796	-.0672	-.0513	-.0430	-.0453	-.0324	9.9990	-.0415	-.0352	-.1635
157.500		.2697	.0625	-.0803	-.0640	-.0595	-.0504	-.0259	-.0387	-.0399	-.0386	-.1501
180.000	.5486	.2323	.0459	-.0996	-.0777	-.0493	-.0489	-.0187	-.0368	-.0357	-.0457	-.1415
202.500		.2188	.0228	-.1180	-.1055	-.0504	-.0579	-.0307	-.0322	-.0311	-.0409	-.1372
225.000	.4678	.2135	.0129	-.1251	-.0944	-.0456	-.0293	-.0225	-.0225	-.0214	-.0355	-.1450
247.500		.2039	-.0020	-.1286	-.0905	-.0394	-.0130	-.0156	-.0126	-.0145	.0266	-.1766
270.000	.4791	.1987	-.0063	-.1348	9.9990	-.0359	-.0226	-.0154	-.0056	-.0131	.0406	-.1857
292.500		.1938	-.0082	-.1356	-.0825	-.0082	-.0586	-.0188	-.0299	-.0298	.1400	-.2097
315.000	.5082	.1940	.0141	-.1313	-.0987	-.0520	-.0476	-.0309	-.0605	-.0142	.2376	-.1991
326.000									-.0105	.0334	.2056	-.2021
346.000		.2508	.0508	-.0998	-.0646	-.1081	-.0335	-.0384	.0202	.1713	.2283	-.2117
360.000	.4995	.2551	.0432	-.0982	-.0581	-.0762	-.0486	-.0308	-.0089	.1662	.3379	-.1861

MACH (2) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 6.8640 PO = 60.028 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5136	.2455	.0787	-.0114	.0173	-.0136	-.0187	-.0165	-.0041	.0573	.1541	-.0689
14.000		.2675	.0900	-.0046	.0189	-.0227	-.0221	-.0170	.0020	.0409	.1930	-.0717
24.000									.0234	.0409	.1034	-.0847
45.000	.6268	.3047	.1148	.0071	.0173	.0167	.0077	-.0052	.0032	-.0052	.1189	-.0797
67.500		.3307	.1328	.0167	.0116	.0111	.0122	.0082	.0150	.0049	.0482	-.0785
90.000	.8573	.3344	.1372	.0195	9.9990	.0093	.0076	.0059	.0042	.0054	.0161	-.0785
112.500		.3256	.1300	.0167	.0082	.0032	.0026	.0020	.0009	-.0012	.0279	-.0621
135.000	.6163	.3107	.1203	.0087	.0031	-.0041	-.0035	-.0052	9.9990	-.0075	-.0064	-.0571
157.500		.2760	.0996	-.0018	-.0080	-.0125	-.0125	-.0136	.0082	-.0159	-.0159	-.0565
180.000	.5201	.2337	.0787	-.0125	-.0165	-.0176	-.0187	-.0170	-.0153	-.0170	-.0206	-.0571
202.500		.2162	.0601	-.0232	-.0255	-.0210	-.0193	-.0176	-.0170	-.0176	-.0227	-.0593

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A012)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

MACH (2) = 3.480 ALPHA (1) = -4.330

DEPENDENT VARIABLE CP

SECTION (1)ANK											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4420	.1914	.0516	-.0300	-.0289	-.0204	-.0159	-.0142	-.0159	-.0176	-.0210	-.0610
247.500		.1790	.0364	-.0351	-.0306	-.0204	-.0153	-.0142	-.0148	-.0142	.0065	-.0633
270.000	.4217	.1734	.0347	-.0362	9.9990	-.0193	-.0120	-.0114	-.0097	-.0080	.0037	-.0706
292.500		.1756	.0381	-.0362	-.0136	-.0103	-.0210	-.0153	-.0091	-.0193	.0240	-.0723
315.000	.4753	.1948	.0454	-.0339	-.0255	-.0187	-.0294	-.0232	-.0373	-.0136	.0964	-.0701
326.000									-.0114	-.0003	.0826	-.0728
346.000		.2561	.0820	-.0120	.0110	-.0396	-.0126	-.0165	-.0007	.0640	.1069	-.0751
360.000	.5136	.2455	.0787	-.0114	.0173	-.0136	-.0187	-.0165	-.0041	.0573	.1541	-.0689

MACH (3) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0710 PO = 90.046 P = .17800

DEPENDENT VARIABLE CP

SECTION (1)ANK											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4910	.1838	.1082	.0767	.0830	.0792	.0666	.0653	.0666	.0704	.0628	-.0026
14.000		.2518	.1044	.0716	.0641	.0603	.0515	.0565	.0540	.0616	.1182	-.0051
24.000									.0237	.0351	.0590	-.0114
45.000	.5905	.2908	.1270	.0691	.0656	.0590	.0527	.0615	.0489	.0515	.0439	-.0089
67.500		.3122	.1371	.0640	.0590	.0552	.0552	.0628	.0489	.0502	.0338	-.0064
90.000	.6258	.3172	.1346	.0615	9.9990	.0452	.0515	.0628	.0389	.0389	.0250	-.0026
112.500		.3109	.1295	.0552	.0477	.0414	.0401	.0653	.0376	.0376	.0300	.0061
135.000	.5920	.2933	.1207	.0515	.0414	.0376	.0351	.0376	9.9990	.0300	.0174	.0111
157.500		.2656	.1069	.0414	.0363	.0313	.0288	.0263	.0943	.0237	.0086	.0086
180.000	.5050	.2329	.0968	.0389	.0338	.0237	.0263	.0237	.0300	.0174	.0112	.0112
202.500		.2151	.0766	.0289	.0250	.0199	.0187	.0174	.0212	.0174	.0111	.0111
225.000	.4318	.1938	.0716	.0237	.0237	.0263	.0212	.0200	.0225	.0174	.0111	.0074
247.500		.1799	.0590	.0187	.0162	.0212	.0162	.0162	.0137	.0111	.0137	.0111
270.000	.4129	.1761	.0540	.0086	9.9990	.0137	.0099	.0162	.0111	.0086	.0212	.0049
292.500		.1799	.0540	.0149	.0263	.0187	.0174	.0162	.0124	.0111	.0225	.0023
315.000	.4570	.1925	.0615	.0237	.0187	.0099	.0111	.0099	.0049	.0111	.0326	.0011
326.000									.0137	.0212	.0300	-.0001
346.000		.2429	.0943	.0250	.0351	.0174	.0162	.0149	.0212	.0300	.0328	-.0064
360.000	.4910	.1838	.1082	.0767	.0830	.0792	.0666	.0653	.0666	.0704	.0628	-.0026

MSFC 696 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A013) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.970 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 10.207 PO = 28.008 P = 3.7710

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5073	.2742	.0470	-.1029	-.0596	-.0596	-.0377	-.0223	-.0049	.1732	.4095	-.1932
14.000		.2732	.0508	-.0993	-.0386	-.1581	-.0276	-.0154	.0114	.1776	.2763	-.2318
24.000									.0190	.1641	.2437	-.2333
45.000	.5693	.2436	.0266	-.1158	-.0665	-.0282	-.0601	-.0173	-.0699	.0307	.2520	-.2298
67.500		.2581	.0311	-.1129	-.0679	-.0009	-.0596	-.0316	-.0308	-.0354	.1387	-.1905
90.000	.5701	.2520	.0224	-.1047	9.9990	-.0322	-.0083	-.0401	-.0155	-.0193	.0266	-.1866
112.500		.2469	.0281	-.1039	-.0687	-.0358	-.0278	-.0305	-.0286	-.0275	.0285	-.1951
135.000	.5782	.2502	.0361	-.1017	-.0724	-.0474	-.0371	-.0269	9.9990	-.0329	-.0317	-.1590
157.500		.2387	.0296	-.0978	-.0728	-.0674	-.0329	-.0185	-.0242	-.0295	-.0317	-.1428
180.000	.5608	.2180	.0273	-.0984	-.0757	-.0359	-.0332	-.0082	-.0196	-.0245	-.0377	-.1419
202.500		.2314	.0417	-.0996	-.0674	-.0363	-.0477	-.0177	-.0143	-.0166	-.0344	-.1439
225.000	.5557	.2466	.0490	-.0963	-.0617	-.0382	-.0310	-.0234	-.0230	-.0147	-.0321	-.1505
247.500		.2540	.0489	-.0927	-.0594	-.0336	-.0275	-.0188	-.0162	-.0173	.0251	-.1845
270.000	.5708	.2529	.0603	-.0990	9.9990	-.0293	-.0165	-.0199	-.0108	-.0153	.0410	-.1961
292.500		.2493	.0489	-.0960	-.0555	-.0036	-.0370	-.0195	-.0320	-.0267	.1547	-.2083
315.000	.5786	.2558	.0376	-.0923	-.0631	-.0256	-.0699	-.0195	-.0525	.0054	.2183	-.2169
326.000									.0137	.0050	.2145	-.2132
346.000		.2760	.0607	-.0962	-.0753	-.1580	-.0325	-.0184	.0618	.1229	.2577	-.2078
360.000	.5073	.2742	.0470	-.1029	-.0596	-.0596	-.0377	-.0223	-.0049	.1732	.4095	-.1932

MACH (2) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8640 PO = 60.035 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5091	.2567	.0814	-.0120	.0099	-.0103	-.0188	-.0137	-.0019	.0510	.1597	-.0650
14.000		.2537	.0802	-.0115	.0104	-.0120	-.0222	-.0149	-.0064	.0476	.1768	-.0711
24.000									.0037	.0522	.1428	-.0807
45.000	.5443	.2475	.0797	-.0120	.0025	.0008	-.0137	-.0132	-.0126	.0019	.1024	-.0756
67.500		.2499	.0809	-.0126	-.0092	-.0058	-.0114	-.0103	-.0035	-.0114	.0409	-.0717
90.000	.5412	.2488	.0826	-.0103	9.9990	-.0081	-.0052	-.0069	-.0081	-.0081	.0075	-.0723
112.500		.2482	.0803	-.0120	-.0131	-.0103	-.0075	-.0058	-.0058	-.0075	.0161	-.0644
135.000	.5398	.2501	.0798	-.0131	-.0153	-.0097	-.0086	-.0058	9.9990	-.0069	-.0080	-.0593
157.500		.2471	.0820	-.0126	-.0143	-.0126	-.0086	-.0058	.0189	-.0064	-.0109	-.0565
180.000	.5302	.2369	.0792	-.0126	-.0143	-.0097	-.0092	-.0064	-.0041	-.0069	-.0103	-.0548
202.500		.2484	.0776	-.0148	-.0165	-.0120	-.0108	-.0080	-.0074	-.0069	-.0103	-.0587

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A013)

MACH (2) = 3.480 ALPHA (1) = -.280

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5192	.2422	.0804	-.0131	-.0148	-.0120	-.0091	-.0069	-.0058	-.0063	-.0069	-.0616
247.500		.2460	.0797	-.0131	-.0137	-.0114	-.0086	-.0052	-.0052	-.0075	.0127	-.0672
270.000	.5324	.2476	.0797	-.0131	9.9990	-.0120	-.0052	-.0035	-.0081	-.0064	.0094	-.0706
292.500		.2386	.0786	-.0143	-.0002	-.0047	-.0002	-.0097	-.0041	-.0114	.0290	-.0706
315.000	.5541	.2454	.0781	-.0148	-.0047	.0042	-.0148	-.0148	-.0114	-.0165	.0714	-.0717
326.000									.0206	.0144	.0516	-.0762
346.000		.2799	.0990	-.0018	.0127	-.0469	-.0165	-.0153	.0099	.0618	.1135	-.0751
360.000	.5091	.2567	.0814	-.0120	.0099	-.0103	-.0188	-.0137	-.0019	.0510	.1597	-.0650

MACH (3) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0710 PO = 90.046 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4381	.2166	.0855	.0490	.0540	.0490	.0339	.0351	.0414	.0440	.0338	-.0253
14.000		.2102	.0729	.0414	.0376	.0288	.0263	.0212	.0288	.0376	.0853	-.0291
24.000									.0011	.0161	.0615	-.0328
45.000	.4840	.2051	.0741	.0313	.0326	.0225	.0187	.0162	.0162	.0200	.0275	-.0354
67.500		.2139	.0729	.0225	.0225	.0187	.0200	.0137	.0200	.0149	.0074	-.0303
90.000	.4835	.2102	.0666	.0200	9.9990	.0124	.0149	.0111	.0096	.0061	-.0026	-.0278
112.500		.2089	.0628	.0174	.0124	.0074	.0099	.0086	.0086	.0036	-.0064	-.0202
135.000	.4860	.2140	.0666	.0149	.0086	.0086	.0061	.0074	9.9990	.0011	-.0115	-.0165
157.500		.2102	.0666	.0124	.0086	.0086	.0049	.0023	.0031	-.0013	-.0152	-.0165
180.000	.4860	.2013	.0666	.0099	.0011	-.0001	-.0001	-.0026	.0086	-.0102	-.0139	-.0165
202.500		.2177	.0640	.0061	-.0001	-.0013	-.0051	-.0051	-.0026	-.0051	-.0139	-.0165
225.000	.4872	.2177	.0640	.0049	-.0026	-.0001	-.0039	-.0051	-.0039	-.0102	-.0139	-.0177
247.500		.2227	.0691	.0049	-.0026	-.0051	-.0051	-.0051	-.0076	-.0139	-.0064	-.0278
270.000	.4953	.2215	.0716	.0036	9.9990	-.0039	-.0064	-.0039	-.0089	-.0114	-.0027	-.0190
292.500		.2203	.0716	.0011	.0086	.0011	-.0051	-.0051	-.0039	-.0101	.0036	-.0215
315.000	.5162	.2153	.0653	.0011	.0036	-.0089	-.0064	-.0089	-.0152	-.0139	.0187	-.0265
326.000									.0011	.0011	.0212	-.0303
346.000		.2442	.0817	.0074	.0099	-.0139	-.0127	-.0114	-.0026	.0061	.0338	-.0253
360.000	.4381	.2166	.0855	.0490	.0540	.0490	.0339	.0351	.0414	.0440	.0338	-.0253

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A014) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = 3.790 BETA = .00000 Q(PSI) = 10.244 PO = 28.005 P = 3.8120

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5334	.2763	.0440	-.1059	-.0678	-.0742	-.0560	-.0220	.0141	.1052	.2239	-.1997
14.000		.2485	.0270	-.1222	-.0769	-.0973	-.0527	-.0319	-.0077	.1714	.3081	-.2208
24.000									.0024	.1749	.2892	-.2298
45.000	.5303	.1914	-.0141	-.1253	-.0863	-.0780	-.0534	-.0296	-.0198	.0810	.1731	-.2380
67.500		.1697	-.0133	-.1380	-.0968	-.0126	-.0681	-.0235	-.0307	.0288	.1417	-.2004
90.000	.4902	.1563	-.0227	-.1366	9.9990	-.0227	-.0193	-.0340	-.0035	-.0159	.0357	-.1919
112.500		.1636	-.0107	-.1386	-.0963	-.0420	-.0242	-.0306	-.0220	-.0208	.0338	-.1993
135.000	.5118	.1844	.0070	-.1368	-.0987	-.0564	-.0375	-.0262	9.9990	-.0311	-.0291	-.1616
157.500		.2044	.0093	-.1144	-.0933	-.0820	-.0507	-.0239	-.0337	-.0386	-.0413	-.1497
180.000	.5643	.2279	.0270	-.0991	-.0798	-.0537	-.0530	-.0254	-.0303	-.0379	-.0583	-.1458
202.500		.2647	.0500	-.0893	-.0757	-.0515	-.0610	-.0421	-.0349	-.0330	-.0506	-.1563
225.000	.6383	.3041	.0813	-.0658	-.0416	-.0333	-.0382	-.0382	-.0371	-.0258	-.0454	-.1693
247.500		.3236	.0953	-.0559	-.0310	-.0201	-.0254	-.0144	-.0212	-.0239	.0187	-.1970
270.000	.6960	.3350	.1040	-.0446	9.9990	-.0095	-.0080	-.0175	-.0129	-.0059	.0104	-.2238
292.500		.3275	.0957	-.0477	-.0254	-.0107	-.0088	-.0220	-.0137	-.0311	.1694	-.2094
315.000	.6510	.3199	.0896	-.0684	-.0103	.0032	-.0586	-.0311	-.0428	.0017	.2233	-.2153
326.000									-.0111	.0428	.1719	-.2008
348.000		.3079	.0699	-.0843	-.0632	-.1738	-.0567	-.0503	.0700	.0859	.1550	-.2214
360.000	.5334	.2763	.0440	-.1059	-.0678	-.0742	-.0560	-.0220	.0141	.1052	.2239	-.1997

MACH (2) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 6.8640 PO = 60.035 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5091	.2626	.0788	-.0125	-.0142	-.0311	-.0221	-.0204	-.0170	.0348	.1333	-.0706
14.000		.2354	.0702	-.0176	-.0142	-.0424	-.0255	-.0215	-.0165	.0499	.1499	-.0734
24.000									-.0086	.0469	.1193	-.0790
45.000	.4624	.1931	.0494	-.0277	-.0170	-.0221	-.0351	-.0210	-.0215	.0003	.0567	-.0796
67.500		.1813	.0398	-.0334	-.0277	-.0187	-.0238	-.0215	-.0029	-.0204	.0285	-.0734
90.000	.4282	.1761	.0386	-.0340	9.9990	-.0182	-.0114	-.0199	-.0120	-.0097	.0048	-.0734
112.500		.1800	.0397	-.0345	-.0317	-.0182	-.0137	-.0188	-.0143	-.0137	.0059	-.0655
135.000	.4575	.1964	.0499	-.0306	-.0289	-.0221	-.0148	-.0176	9.9990	-.0176	-.0200	-.0656
157.500		.2144	.0628	-.0233	-.0250	-.0244	-.0182	-.0176	-.0126	-.0188	-.0227	-.0621
180.000	.5268	.2330	.0792	-.0143	-.0188	-.0204	-.0188	-.0171	-.0176	-.0182	-.0210	-.0610
202.500		.2764	.0955	-.0058	-.0109	-.0148	-.0131	-.0178	-.0171	-.0159	-.0165	-.0605

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A014)

MACH (2) = 3.480 ALPHA (1) = 3.770

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6018	.2997	.1148	-.0001	-.0012	-.0041	-.0048	-.0170	-.0097	-.0074	-.0075	-.0621
247.500		.3209	.1293	.0133	.0054	.0003	.0026	.0003	-.0007	-.0019	.0183	-.0700
270.000	.6459	.3305	.1333	.0166	9.9990	.0059	.0082	.0065	-.0007	.0003	.0160	-.0774
292.500		.3175	.1282	.0133	.0178	.0172	.0133	.0054	.0037	-.0024	.0454	-.0785
315.000	.6257	.3012	.1161	.0075	.0137	.0159	.0041	-.0071	-.0116	-.0071	.1153	-.0785
326.000									.0156	.0009	.0955	-.0847
346.000		.2981	.1160	.0089	.0027	-.0328	-.0170	-.0159	-.0035	.0466	.1012	-.0779
360.000	.5091	.2626	.0788	-.0125	-.0142	-.0311	-.0221	-.0204	-.0170	.0348	.1333	-.0706

MACH (3) = 4.960 ALPHA (1) = 3.730 BETA = .00000 Q(PSI) = 3.0700 PO = 90.008 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4408	.2495	.1234	.0831	.0844	.0818	.0680	.0692	.0705	.0730	.0439	-.0039
14.000		.2130	.0944	.0692	.0604	.0591	.0541	.0491	.0516	.0604	.0754	-.0076
24.000									.0200	.0263	.0603	-.0089
45.000	.4345	.1826	.0805	.0578	.0541	.0541	.0452	.0427	.0415	.0478	.0225	-.0114
67.500		.1700	.0717	.0452	.0427	.0452	.0478	.0377	.0415	.0415	.0187	-.0089
90.000	.4042	.1675	.0717	.0427	9.9990	.0364	.0465	.0364	.0351	.0339	.0061	-.0076
112.500		.1712	.0691	.0376	.0376	.0288	.0389	.0351	.0313	.0326	.0124	.0023
135.000	.4357	.1852	.0679	.0314	.0276	.0289	.0289	.0188	9.9990	.0238	.0099	.0049
157.500		.2039	.0805	.0338	.0288	.0225	.0288	.0225	.0477	.0212	.0112	.0061
180.000	.5120	.2279	.0918	.0364	.0275	.0250	.0238	.0200	.0225	.0162	.0086	.0074
202.500		.2682	.1094	.0376	.0289	.0212	.0225	.0187	.0187	.0162	.0074	.0061
225.000	.5945	.2972	.1271	.0427	.0326	.0275	.0263	.0212	.0225	.0200	.0137	.0036
247.500		.3186	.1346	.0452	.0313	.0238	.0250	.0212	.0162	.0162	.0301	.0023
270.000	.6335	.3261	.1435	.0490	9.9990	.0288	.0288	.0263	.0200	.0200	.0301	.0035
292.500		.3198	.1435	.0502	.0427	.0313	.0313	.0250	.0263	.0263	.0351	-.0013
315.000	.5993	.2959	.1268	.0376	.0338	.0301	.0263	.0212	.0149	.0238	.0376	-.0039
326.000									.0212	.0275	.0399	-.0101
346.000		.2808	.1195	.0351	.0288	.0187	.0137	.0124	.0124	.0187	.0414	-.0139
360.000	.4408	.2495	.1234	.0831	.0844	.0818	.0690	.0692	.0705	.0730	.0439	-.0039

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A015) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = 7.840 BETA = .00000 Q(PSI) = 10.269 PO = 28.008 P = 3.8380

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5406	.2807	.0406	-.1090	-.0762	-.1082	-.1048	-.0792	-.0946	.0594	.1103	-.2084
14.000		.2232	-.0004	-.1266	-.1025	-.0761	-.0874	-.0547	-.0309	.1358	.2588	-.2341
24.000									-.0193	.1433	.2828	-.2362
45.000	.4406	.1231	-.0385	-.1594	-.1233	-.1719	-.1052	-.0494	-.0803	.0383	.1976	-.2472
67.500		.1081	-.0498	-.1614	-.1128	-.0287	-.0374	-.0208	-.0174	-.0513	.1461	-.2149
90.000	.3762	.1023	-.0633	-.1645	9.9990	-.0057	-.0290	-.0271	-.0027	-.0053	.0074	-.2144
112.500		.1167	-.0592	-.1624	-.1135	-.0415	-.0272	-.0328	-.0317	-.0321	.0244	-.2148
135.000	.4146	.1403	-.0388	-.1616	-.1228	-.0776	-.0433	-.0403	9.9990	-.0429	-.0425	-.1795
157.500		.1632	-.0083	-.1418	-.1264	-.1287	-.0899	-.0545	-.0519	-.0594	-.0641	-.1756
180.000	.5457	.2093	.0213	-.1081	-.1036	-.1055	-.1137	-.0945	-.0821	-.0791	-.0946	-.1703
202.500		.2857	.0609	-.0835	-.0703	-.0797	-.0977	-.0974	-.0929	-.0885	-.0951	-.1705
225.000	.7009	.3700	.1197	-.0434	-.0215	-.0287	-.0389	-.0517	-.0581	-.0483	-.0622	-.1873
247.500		.4166	.1603	-.0162	.0134	.0048	.0006	.0014	-.0083	-.0147	.0221	-.2224
270.000	.8037	.4459	.1800	-.0061	9.9990	.0244	.0168	.0172	.0082	.0172	.0217	-.2446
292.500		.4190	.1708	-.0173	.0142	.0198	.0134	.0021	.0195	-.0195	.1829	-.2359
315.000	.7313	.3832	.1456	-.0399	.0213	.0036	-.0204	-.0286	-.0226	-.0185	.2556	-.2521
326.000									-.0177	.0379	.1782	-.2334
346.000		.3022	.0677	-.0898	-.0687	-.1554	-.1301	-.1199	-.0027	.0443	.1110	-.2065
360.000	.5406	.2807	.0406	-.1090	-.0762	-.1082	-.1048	-.0792	-.0946	.0594	.1103	-.2084

MACH (2) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(PSI) = 6.8640 PO = 60.032 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6108	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4930	.2702	.0893	-.0092	-.0114	-.0300	-.0300	-.0317	-.0289	.0009	.0330	-.0475
14.000		.2212	.0845	-.0227	-.0272	-.0199	-.0300	-.0340	-.0261	.0273	.0955	-.0824
24.000									-.0165	.0431	.0832	-.0903
45.000	.3885	.1474	.0228	-.0413	-.0340	-.0548	-.0554	-.0413	-.0272	.0014	.0544	-.0869
67.500		.1221	.0077	-.0486	-.0407	-.0232	-.0345	-.0255	-.0227	-.0187	.0313	-.0779
90.000	.3301	.1164	.0054	-.0486	9.9990	-.0204	-.0137	-.0120	-.0137	-.0131	.0054	-.0745
112.500		.1220	.0071	-.0486	-.0413	-.0312	-.0323	-.0413	-.0266	-.0278	.0043	-.0740
135.000	.3795	.1468	.0195	-.0447	-.0441	-.0374	-.0334	-.0374	9.9990	-.0407	-.0385	-.0723
157.500		.1835	.0483	-.0328	-.0379	-.0424	-.0351	-.0351	-.0322	.0413	-.0441	-.0700
180.000	.5147	.2274	.0764	-.0143	-.0227	-.0328	-.0385	-.0402	-.0441	-.0447	-.0469	-.0683
202.500		.3042	.1176	.0043	-.0024	-.0153	-.0176	-.0238	-.0283	-.0272	-.0283	-.0689

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A015)

MACH (2) = 3.480 ALPHA (1) = 7.800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6767	.3620	.1597	.0330	.0211	.0087	.0065	.0009	-.0030	-.0013	-.0035	-.0723
247.500		.4082	.1868	.0510	.0397	.0273	.0251	.0223	.0183	.0144	.0426	-.0723
270.000	.7733	.4276	.2038	.0595	9.9990	.0370	.0359	.0319	.0274	.0280	.0426	-.0757
292.500		.4073	.1931	.0528	.0449	.0415	.0347	.0313	.0347	.0313	.0815	-.0751
315.000	.7100	.3693	.1637	.0358	.0347	.0302	.0234	.0195	.0082	.0104	.1564	-.0751
326.000									.0313	.0110	.1169	-.0796
346.000		.2922	.1175	.0121	.0009	-.0250	-.0379	-.0452	-.0300	.0037	.0504	-.0796
360.000	.4930	.2702	.0893	-.0092	-.0114	-.0300	-.0300	-.0317	-.0289	.0009	.0330	-.0475

MACH (3) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(PSI) = 3.0700 PO = 90.024 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4030	.2543	.1132	.0641	.0666	.0616	.0502	.0527	.0477	.0515	.0061	-.0076
14.000		.2077	.0855	.0527	.0452	.0439	.0414	.0364	.0351	.0414	.0527	-.0114
24.000									.0112	.0112	.0200	-.0127
45.000	.3602	.1409	.0553	.0364	.0389	.0351	.0263	.0250	.0225	.0263	-.0013	-.0177
67.500		.1220	.0464	.0263	.0313	.0301	.0338	.0212	.0238	.0238	.0011	-.0139
90.000	.3071	.1157	.0464	.0275	9.9990	.0288	.0326	.0250	.0225	.0250	-.0026	-.0152
112.500		.1195	.0414	.0212	.0263	.0263	.0263	.0225	.0175	.0187	.0036	-.0064
135.000	.3526	.1409	.0490	.0212	.0200	.0212	.0212	.0200	9.9990	.0124	-.0001	-.0089
157.500		.1762	.0590	.0212	.0200	.0137	.0162	.0137	.0401	.0112	-.0001	-.0064
180.000	.4975	.2203	.0868	.0288	.0212	.0137	.0149	.0112	.0112	.0011	-.0026	-.0076
202.500		.2696	.1170	.0389	.0275	.0225	.0187	.0124	.0112	.0124	.0051	-.0064
225.000	.6674	.3526	.1586	.0553	.0439	.0351	.0313	.0238	.0212	.0212	.0212	-.0114
247.500		.4005	.1901	.0704	.0540	.0389	.0401	.0351	.0313	.0313	.0527	-.0026
270.000	.7558	.4219	.2052	.0779	9.9990	.0452	.0490	.0427	.0364	.0363	.0527	-.0051
292.500		.4030	.1951	.0716	.0590	.0477	.0452	.0389	.0351	.0427	.0553	-.0039
315.000	.6739	.3602	.1649	.0565	.0490	.0401	.0376	.0301	.0275	.0414	.0653	-.0101
326.000									.0414	.0490	.0742	-.0101
346.000		.2568	.1183	.0364	.0325	.0112	.0112	.0086	.0074	.0112	.0200	-.0127
360.000	.4030	.2543	.1132	.0641	.0666	.0616	.0502	.0527	.0477	.0515	.0061	-.0076

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A016) (16 NOV 74)

REFERENCE DATA

SREF = 872.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = 12.550 BETA = .00000 Q(PSI) = 10.220 PO = 28.000 P = 3.7870

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5023	.2671	.0554	-.1001	-.0998	-.1728	-.1444	-.1751	-.1441	-.0244	.0285	-.2023
14.000		.1953	-.0085	-.1394	-.1310	-.0955	-.1227	-.0891	-.0928	-.0251	.1262	-.2567
24.000									-.0327	.0728	.2521	-.2457
45.000	.3709	.0867	-.0751	-.1791	-.1523	-.2370	-.1133	-.0675	-.0690	.0251	.1519	-.2394
67.500		.0732	-.0941	-.1847	-.1282	-.0426	-.0619	-.0551	-.0040	-.1017	.1239	-.2352
90.000	.2907	.0618	-.1013	-.1812	9.9990	.0020	-.0419	-.0252	-.0343	-.0222	-.0244	-.2407
112.500		.0678	-.0929	-.1826	-.1330	-.0562	-.0596	-.0645	-.0774	-.0876	-.0308	-.2325
135.000	.3434	.0886	-.0792	-.1799	-.1443	-.1114	-.0944	-.091	9.9990	-.1194	-.1120	-.2127
157.500		.1296	-.0430	-.1661	-.1487	-.1865	-.1638	-.1070	-.0983	-.0937	-.0902	-.2033
180.000	.5137	.1959	.0133	-.1240	-.1271	-.1528	-.1714	-.1801	-.1687	-.1445	-.1311	-.2053
202.500		.2989	.0944	-.0729	-.0835	-.0941	-.1093	-.1252	-.1426	-.1316	-.1360	-.2049
225.000	.7492	.4114	.1851	-.0070	-.0021	-.0236	-.0161	-.0475	-.0649	-.0509	-.0584	-.2180
247.500		.4891	.2425	.0489	.0561	.0368	.0387	.0349	.0035	.0035	.0701	-.2534
270.000	.9073	.5236	.2564	.0709	9.9990	.0739	.0648	.0588	.0323	.0425	.0584	-.2639
292.500		.4951	.2294	.0565	.0618	.0603	.0440	.0489	.0607	.0084	.1844	-.2344
315.000	.8039	.4365	.1818	.0186	.0379	.0251	.0137	.0058	-.0051	-.0062	.2722	-.2386
326.000									-.0009	.0239	.2117	-.2265
346.000		.2674	.0549	-.0924	-.1015	-.1684	-.1900	-.1858	-.0879	-.0274	.0606	-.2282
360.000	.5023	.2671	.0554	-.1001	-.0998	-.1728	-.1444	-.1751	-.1441	-.0244	.0285	-.2023

MACH (2) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(PSI) = 6.8650 PO = 60.040 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4815	.2754	.0973	-.0052	-.0080	-.0362	-.0424	-.0531	-.0289	-.0204	-.0278	-.0779
14.000		.2037	.0555	-.0255	-.0317	-.0289	-.0368	-.0435	-.0295	-.0159	.0527	-.0779
24.000									-.0143	-.0075	.0307	-.0813
45.000	.3226	.1045	-.0024	-.0509	-.0475	-.0644	-.0588	-.0514	-.0441	-.0255	.0206	-.0836
67.500		.0775	-.0171	-.0582	-.0509	-.0345	-.0424	-.0531	-.0475	-.0317	-.0131	-.0869
90.000	.2499	.0685	-.0104	-.0588	9.9990	-.0171	-.0159	-.0283	-.0283	-.0261	-.0182	-.0836
112.500		.0764	-.0182	-.0593	-.0514	-.0531	-.0627	-.0582	-.0571	-.0576	-.0379	-.0824
135.000	.3074	.1041	-.0024	-.0554	-.0548	-.0542	-.0531	-.0593	9.9990	-.0565	-.0571	-.0802
157.500		.1530	.0245	-.0430	-.0520	-.0610	-.0537	-.0576	-.0464	-.0582	-.0582	-.0799
180.000	.4927	.2162	.0588	-.0178	-.0301	-.0476	-.0510	-.0583	-.0616	-.0539	-.0638	-.0785
202.500		.3243	.1304	.0161	.0069	-.0137	-.0199	-.0278	-.0312	-.0306	-.0300	-.0796

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A016)

MACH (2) = 3.480 ALPHA (1) = 12.520

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.7412	.4150	.1941	.0555	.0392	.0234	.0206	.0121	.0087	.0104	.0082	-.0847
247.500		.4890	.2450	.0877	.0731	.0556	.0545	.0488	.0443	.0443	.0758	-.0813
270.000	.8911	.5254	.2719	.1034	9.9990	.0707	.0707	.0651	.0606	.0606	.0758	-.0734
292.500		.4984	.2572	.0933	.0769	.0719	.0673	.0606	.0657	.0645	.1321	-.0751
315.000	.7863	.4375	.2093	.0640	.0538	.0572	.0521	.0420	.0403	.0409	.2105	-.0836
326.000									.0673	.0403	.1671	-.0841
346.000		.2600	.1034	.0065	-.0069	-.0362	-.0486	-.0582	-.0312	-.0216	.0121	-.0847
360.000	.4815	.2754	.0973	-.0052	-.0080	-.0362	-.0424	-.0531	-.0289	-.0204	-.0278	-.0779

MACH (3) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.019 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3841	.2545	.1221	.0717	.0730	.0705	.0528	.0515	.0528	.0541	.0124	-.0051
14.000		.2003	.0881	.0578	.0465	.0427	.0440	.0352	.0364	.0415	.0968	-.0101
24.000									.0086	.0049	.0124	-.0139
45.000	.3022	.1145	.0565	.0439	.0401	.0364	.0313	.0301	.0288	.0313	-.0026	-.0114
67.500		.0880	.0464	.0313	.0313	.0288	.0364	.0238	.0298	.0263	-.0039	-.0139
90.000	.2329	.0817	.0364	.0275	9.9990	.0275	.0313	.0225	.0212	.0250	-.0051	-.0114
112.500		.0838	.0364	.0238	.0263	.0200	.0263	.0200	.0200	.0187	.0036	-.0051
135.000	.2896	.1057	.0427	.0225	.0187	.0137	.0212	.0162	9.9990	.0124	-.0026	-.0114
157.500		.1510	.0553	.0250	.0200	.0124	.0175	.0124	.0439	.0137	-.0039	-.0101
180.000	.4887	.2165	.0893	.0326	.0263	.0149	.0162	.0086	.0124	.0049	-.0013	-.0089
202.500		.3135	.1409	.0502	.0364	.0212	.0250	.0149	.0175	.0162	.0099	-.0114
225.000	.7381	.4093	.1976	.0779	.0565	.0389	.0452	.0338	.0338	.0338	.0376	-.0127
247.500		.4849	.2468	.1044	.0792	.0641	.0653	.0578	.0578	.0603	.0893	-.0039
270.000	.8980	.5227	.2720	.1195	9.9990	.0767	.0792	.0742	.0715	.0729	.0956	-.0051
292.500		.5013	.2644	.1120	.0880	.0754	.0754	.0691	.0729	.0817	.1044	-.0101
315.000	.7746	.4395	.2228	.0868	0704	.0653	.0716	.0553	.0628	.0842	.0981	-.0127
326.000									.0591	.0842	.1120	-.0190
346.000		.2417	.1157	.0401	.0288	.0086	.0124	.0137	.0074	.0061	.0187	-.0127
360.000	.3841	.2545	.1221	.0717	.0730	.0705	.0528	.0515	.0528	.0541	.0124	-.0051

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A017) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = 16.660 BETA = .00000 Q(PSI) = 10.235 PO = 28.004 P = 3.8020

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4082	.3160	.0617	-.1003	-.1142	-.2049	-.2057	-.2435	-.1241	-.0980	-.0636	-.2215
14.000		.1723	-.0255	-.1516	-.1500	-.1368	-.1784	-.1686	-.1561	-.0895	-.0043	-.2174
24.000									-.1286	-.0980	.0504	-.2272
45.000	.3043	.0368	-.1142	-.2056	-.1913	-.2449	-.1127	-.0881	-.0749	-.0681	.0776	-.2618
67.500		.0043	-.1232	-.2029	-.1602	-.1258	-.1330	-.1047	-.0964	-.0745	.0009	-.2749
90.000	.2416	-.0035	-.1248	-.1977	9.9990	.0043	-.0530	-.0511	-.0825	-.0817	-.0806	-.2359
112.500		.0058	-.1243	-.2014	-.1640	-.1258	-.1375	-.1481	-.1542	-.1621	-.1207	-.2669
135.000	.2641	.0274	-.1143	-.2046	-.1839	-.1831	-.1865	-.2012	9.9990	-.1853	-.1600	-.2378
157.500		.0833	-.0815	-.1912	-.1962	-.2185	-.1727	-.1428	-.1334	-.1405	-.1354	-.2325
180.000	.4695	.1730	-.0042	-.1423	-.1559	-.1910	-.2069	-.1918	-.1740	-.1623	-.1572	-.2399
202.500		.3165	.1060	-.0663	-.0825	-.1037	-.1199	-.1343	-.1524	-.1430	-.1429	-.2431
225.000	.8045	.4783	.2182	.0307	.0357	.0013	.0013	-.0281	-.0474	-.0296	-.0375	-.2510
247.500		.5901	.3027	.1075	.1132	.0894	.0811	.0773	.0482	.0470	.1305	-.2756
270.000	1.0214	.6463	.3442	.1322	9.9990	.1458	.1246	.1095	.0921	.1069	.1218	-.2389
292.500		.6001	.3136	.1041	.1207	.1211	.0965	.1011	.1302	.0663	.2718	-.2809
315.000	.8801	.5098	.2410	.0466	.0523	.0633	.0515	.0625	.0481	.0455	.3509	-.2644
326.000									.0451	.0538	.2942	-.2632
346.000		.2303	.0206	-.1128	-.1426	-.2019	-.2122	-.2208	-.1177	-.1037	-.0904	-.2540
360.000	.4082	.3160	.0617	-.1003	-.1142	-.2049	-.2057	-.2435	-.1241	-.0990	-.0636	-.2215

MACH (2) = 3.480 ALPHA (1) = 16.560 BETA = .00000 Q(PSI) = 6.8650 PO = 60.036 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3643	.2844	.0956	-.0007	-.0046	-.0368	-.0520	-.0554	-.0418	-.0452	-.0188	-.0864
14.000		.1874	.0476	-.0272	-.0323	-.0430	-.0486	-.0593	-.0413	-.0385	.0392	-.0881
24.000									-.0398	-.0323	-.0261	-.0869
45.000	.2812	.0873	-.0182	-.0554	-.0543	-.0627	-.0576	-.0548	-.0481	-.0424	-.0138	-.0869
67.500		.0388	-.0362	-.0621	-.0582	-.0531	-.0833	-.0593	-.0452	-.0413	-.0272	-.0889
90.000	.1828	.0352	-.0351	-.0618	9.9990	-.0103	-.0345	-.0413	-.0469	-.0481	-.0396	-.0881
112.500		.0380	-.0374	-.0644	-.0618	-.0683	-.0621	-.0644	-.0610	-.0610	-.0588	-.0836
135.000	.2382	.0657	-.0249	-.0627	-.0649	-.0644	-.0632	-.0632	9.9990	-.0632	-.0655	-.0836
157.500		.1220	.0071	-.0497	-.0616	-.0689	-.0650	-.0650	-.0520	-.0655	-.0689	-.0836
180.000	.4688	.2082	.0657	-.0176	-.0334	-.0509	-.0565	-.0627	-.0627	-.0650	-.0672	-.0830
202.500		.3479	.1485	.0279	.0104	-.0086	-.0131	-.0221	-.0233	-.0227	-.0221	-.0830

MSFC 586 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A017)

MACH (2) = 3.480 ALPHA (1) = 16.560

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1820	.2160	.3220	.5180	.6100	.7350	.8800	.8920	.9230	.6540
THETA												
225.000	.8066	.4817	.2427	.0900	.0719	.0483	.0471	.0359	.0359	.0392	.0364	-.0858
247.500		.5898	.3203	.1406	.1226	.1000	.0978	.0944	.0921	.0910	.1214	-.0785
270.000	1.0195	.6392	.3592	.1643	9.9990	.1231	.1237	.1197	.1158	.1181	.1278	-.0655
292.500		.6015	.3372	.1496	.1259	.1209	.1175	.1119	.1192	.1209	.2026	-.0672
315.000	.8742	.5138	.2662	.1045	.0893	.1062	.0944	.0837	.0888	.0910	.3019	-.0796
326.000									.1102	.0826	.2403	-.0785
346.000		.2274	.0826	-.0007	-.0103	-.0488	-.0616	-.0599	-.0430	-.0469	.0223	-.0920
360.000	.3643	.2844	.0956	-.0007	-.0046	-.0368	-.0520	-.0554	-.0418	-.0452	-.0188	-.0864

MACH (3) = 4.960 ALPHA (1) = 16.470 BETA = .00000 Q(PSI) = 3.0700 PO = 90.021 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3148	.2621	.1146	.0768	.0717	.0730	.0528	.0553	.0528	.0515	.0149	-.0064
14.000		.1838	.0805	.0590	.0502	.0452	.0414	.0338	.0338	.0364	.0603	-.0089
24.000									.0074	.0036	-.0001	-.0152
45.000	.2480	.0931	.0527	.0452	.0414	.0389	.0288	.0301	.0313	.0275	-.0089	-.0139
67.500		.0704	.0364	.0313	.0338	.0313	.0338	.0225	.0288	.0250	-.0076	-.0152
90.000	.1737	.0653	.0338	.0313	9.9990	.0326	.0351	.0263	.0263	.0238	-.0076	-.0127
112.500		.0641	.0313	.0275	.0288	.0187	.0263	.0212	.0200	.0187	.0023	-.0031
135.000	.2279	.0805	.0301	.0212	.0187	.0149	.0162	.0137	9.9990	.0086	-.0051	-.0076
157.500		.1296	.0490	.0250	.0212	.0112	.0162	.0112	.0502	.0086	-.0051	-.0101
180.000	.4698	.2102	.0855	.0351	.0263	.0175	.0149	.0099	.0137	.0036	-.0026	-.0089
202.500		.3413	.1548	.0628	.0439	.0338	.0275	.0212	.0250	.0212	.0175	-.0114
225.000	.8087	.4735	.2480	.1094	.0855	.0841	.0666	.0578	.0628	.0603	.0666	-.0114
247.500		.5831	.3161	.1523	.1233	.1044	.1082	.1031	.1044	.1044	.1523	-.0039
270.000	1.0203	.6361	.3551	.1750	9.9990	.1271	.1258	.1258	.1271	.1296	.1661	.0023
292.500		.6046	.3337	.1598	.1296	.1170	.1195	.1157	.1195	.1220	.2029	-.0013
315.000	.8729	.5189	.2757	.1246	.1019	.1132	.1019	.0994	.1019	.1359	.3650	-.0013
326.000									.1094	.1271	.1951	-.0051
346.000		.2165	.1008	.0389	.0313	.0112	.0137	.0137	.0086	.0049	.0313	-.0139
360.000	.3148	.2621	.1146	.0768	.0717	.0730	.0528	.0553	.0528	.0515	.0149	-.0064

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A01B) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = 20.740 BETA = .00000 Q(PSI) = 10.237 PO = 28.006 P = 3.8040

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2522	.3324	.0345	-.0964	-.1662	-.2334	-.2493	-.2172	-.1745	-.1534	-.1222	-.2545
14.000		.1449	-.0498	-.1630	-.1785	-.2064	-.2253	-.2189	-.1671	-.1199	-.0326	-.2357
24.000									-.1883	-.1375	-.0232	-.2562
45.000	.2275	-.0239	-.1490	-.2303	-.2163	-.2443	-.1502	-.1214	-.1600	-.1702	-.0251	-.2571
67.500		-.0307	-.1466	-.2233	-.2127	-.2169	-.1806	-.1006	-.1142	-.1297	-.0565	-.2758
90.000	.1611	-.0409	-.1463	-.2053	9.9990	-.0368	-.0957	-.1135	-.1312	-.1339	-.1302	-.2502
112.500		-.0380	-.1552	-.2179	-.2036	-.2164	-.2176	-.2145	-.1756	-.1673	-.1230	-.2522
135.000	.1749	-.0311	-.1583	-.2360	-.2292	-.2349	-.2394	-.2171	9.9990	-.1662	-.1594	-.2387
157.500		.0266	-.1197	-.2151	-.2385	-.2196	-.1878	-.1610	-.1682	-.1769	-.1695	-.2264
180.000	.4231	.1452	-.0258	-.1543	-.1717	-.2083	-.2193	-.1792	-.1977	-.2011	-.2003	-.2310
202.500		.3307	.1135	-.0568	-.0678	-.0969	-.1199	-.1225	-.1445	-.1384	-.1374	-.2340
225.000	.8602	.5424	.2599	.0708	.0802	.0375	.0262	.0092	-.0141	.0017	-.0023	-.2434
247.500		.6891	.3818	.1688	.1787	.1575	.1420	.1378	.1125	.1060	.2009	-.2688
270.000	1.1257	.7607	.4464	.2036	9.9990	.2297	.1994	.1888	.1665	.1824	.1950	-.2127
292.500		.7038	.4068	.1704	.1942	.1949	.1704	.1764	.2067	.1337	.3779	-.2774
315.000	.9499	.5822	.3061	.0908	.1078	.1237	.1150	.1184	.1127	.1079	.4503	-.2684
326.000									.1101	.1261	.3861	-.2849
346.000		.1660	-.0288	-.1365	-.1678	-.2400	-.2551	-.2177	-.1693	-.1591	-.1638	-.2743
360.000	.2522	.3324	.0345	-.0964	-.1662	-.2334	-.2493	-.2172	-.1745	-.1534	-.1222	-.2545

MACH (2) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PSI) = 6.8620 PO = 60.017 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2782	.2976	.0805	-.0142	-.0243	-.0407	-.0576	-.0536	-.0497	-.0519	.0037	-.0869
14.000		.1661	.0359	-.0260	-.0322	-.0469	-.0604	-.0610	-.0525	-.0537	.0054	-.0914
24.000									-.0503	-.0503	-.0396	-.0886
45.000	.2027	.0404	-.0300	-.0587	-.0593	-.0644	-.0644	-.0593	-.0570	-.0458	-.0396	-.0903
67.500		.0082	-.0452	-.0649	-.0632	-.0632	-.0627	-.0621	-.0554	-.0531	-.0503	-.0903
90.000	.1283	.0077	-.0452	-.0644	9.9990	-.0384	-.0486	-.0593	-.0593	-.0587	-.0509	-.0898
112.500		.0060	-.0469	-.0644	-.0672	-.0717	-.0644	-.0666	-.0649	-.0644	-.0638	-.0847
135.000	.1723	.0291	-.0418	-.0694	-.0706	-.0706	-.0666	-.0678	9.9990	-.0594	-.0728	-.0854
157.500		.0928	-.0074	-.0570	-.0683	-.0740	-.0683	-.0706	-.0525	-.0706	-.0745	-.0835
180.000	.4411	.1988	.0640	-.0176	-.0339	-.054[illegible]	-.0565	-.0604	-.0616	-.0638	-.0666	-.0958
202.500		.3695	.1689	.0437	.0218	.003[illegible]	-.0012	-.0080	-.0091	-.0074	-.0063	-.0875

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A01B)

MACH (2) = 3.480 ALPHA (1) = 20.610

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8729	.5446	.2938	.1282	.1045	.0820	.0820	.0690	.0719	.0775	.0735	-.0796
247.500		.6931	.4011	.1976	.1773	.1576	.1554	.1508	.1508	.1520	.1869	-.0706
270.000	1.1491	.7607	.4575	.2337	9.9990	.1909	.1931	.1897	.1858	.1897	.2010	-.0542
292.500		.7123	.4242	.2100	.1830	.1830	.1807	.1756	.1892	.1914	.3013	-.0554
315.000	.9676	.5956	.3329	.1508	.1368	.1627	.1514	.1430	.1508	.1508	.3993	-.0669
326.000									.1678	.1384	.3470	-.0723
346.000		.1914	.0550	-.0136	-.0238	-.0599	-.0672	-.0542	-.0514	-.0542	.0330	-.0909
360.000	.2782	.2976	.0805	-.0142	-.0243	-.0407	-.0576	-.0536	-.0497	-.0519	.0037	-.0869

MACH (3) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(PSI) = 3.0700 PO = 90.023 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2606	.2279	.1107	.0691	.0679	.0729	.0515	.0553	.0502	.0515	.0452	-.0064
14.000		.1849	.0805	.0641	.0490	.0515	.0439	.0389	.0364	.0376	.0565	-.0089
24.000									.0036	-.0013	.0036	-.0114
45.000	.2064	.0779	.0502	.0452	.0414	.0464	.0351	.0326	.0301	.0313	-.0139	-.0190
67.500		.0553	.0401	.0338	.0364	.0313	.0376	.0275	.0313	.0263	-.0139	-.0164
90.000	.1258	.0527	.0376	.0301	9.9990	.0288	.0338	.0250	.0250	.0238	-.0114	-.0127
112.500		.0477	.0238	.0225	.0238	.0175	.0250	.0200	.0175	.0162	.0023	-.0026
135.000	.1712	.0603	.0263	.0212	.0137	.0187	.0187	.0149	9.9990	.0112	-.0013	-.0064
157.500		.1094	.0439	.0225	.0187	.0137	.0175	.0112	.0540	.0086	-.0039	-.0064
180.000	.4471	.2039	.0855	.0351	.0225	.0162	.0175	.0112	.0162	.0049	.0011	-.0101
202.500		.3614	.1737	.0729	.0527	.0427	.0401	.0338	.0364	.0376	.0313	-.0114
225.000	.8893	.5328	.2883	.1372	.1094	.0981	.0956	.0931	.0939	.1031	.1082	-.0064
247.500		.6890	.3992	.2039	.1750	.1573	.1674	.1674	.1737	.1775	.2279	.0061
270.000	1.1602	.7595	.4534	.2342	9.9990	.1876	.1964	.2039	.2052	.2115	.3469	.0176
292.500		.7117	.4259	.2153	.1787	.1787	.1863	.1876	.2001	.2014	.3324	.0126
315.000	.9674	.5932	.3287	.1599	1346	.1687	.1561	.1635	.1596	.1775	.3527	-.0013
326.000									.1724	.1850	.3324	-.0013
346.000		.1976	.0905	.0326	.0301	.0137	.0112	.0187	.0039	.0061	.0379	-.0127
360.000	.2606	.2279	.1107	.0691	.0679	.0729	.0515	.0553	.0502	.0515	.0452	-.0064

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 996 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A019) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .2030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = 24.850 BETA = .00000 Q(PSI) = 10.252 PO = 28.008 P = 3.8200

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1293	.2442	.0149	-.1645	-.1898	-.2769	-.2550	-.2003	-.1992	-.1894	-.1455	-.2844
14.000		.1197	-.0589	-.1704	-.2063	-.2266	-.2500	-.2504	-.1908	-.1165	-.1472	-.2596
24.000									-.1836	-.1280	-.1129	-.2562
45.000	.1266	-.0680	-.1845	-.2619	-.2513	-.2340	-.1596	-.1540	-.2117	-.1860	-.0616	-.2567
67.500		-.0721	-.1788	-.2463	-.2550	-.2705	-.2056	-.1464	-.1645	-.2011	-.1196	-.2765
90.000	.1017	-.0774	-.1633	-.2139	9.9990	-.1064	-.1588	-.1690	-.1645	-.1599	-.1677	-.2447
112.500		-.0869	-.1745	-.2417	-.2693	-.2553	-.2493	-.2198	-.1798	-.1805	-.1458	-.2459
135.000	.0795	-.0895	-.2005	-.2616	-.2658	-.2356	-.2190	-.2009	9.9990	-.1805	-.1781	-.2358
157.500		-.0223	-.1586	-.2419	-.2668	-.2284	-.2042	-.1816	-.1706	-.1786	-.1740	-.2264
180.000	.3693	.1183	-.0442	-.1601	-.1794	-.2171	-.2254	-.1967	-.1941	-.1911	-.1911	-.2330
202.500		.3412	.1237	-.0409	-.0541	-.0824	-.1123	-.1145	-.1315	-.1206	-.1192	-.2407
225.000	.9089	.5971	.3147	.1141	.1243	.0820	.0647	.0424	.0285	.0440	.0421	-.2481
247.500		.7880	.4786	.2328	.2599	.2351	.2106	.2019	.1849	.1793	.2913	-.2433
270.000	1.2423	.8730	.5585	.2876	9.9990	.3110	.2823	.2673	.2514	.2722	.2793	-.1857
292.500		.8069	.5016	.2519	.2828	.2673	.2511	.2477	.2937	.2032	.4921	-.2675
315.000	1.0313	.6558	.3697	.1512	.1727	.1972	.1851	.1825	.1832	.1776	.5539	-.2560
326.000									.1880	.2093	.4875	-.2931
346.000		.0866	-.0880	-.1759	-.1902	-.2641	-.2890	-.2136	-.1894	-.1894	-.1802	-.2930
360.000	.1293	.2442	.0149	-.1645	-.1898	-.2769	-.2550	-.2003	-.1992	-.1894	-.1455	-.2844

MACH (2) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.8640 PO = 60.029 P = .81000

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1807	.1845	.1028	-.0357	-.0379	-.0497	-.0593	-.0520	-.0554	-.0554	.0257	-.0886
14.000		.1422	.0324	-.0295	-.0441	-.0565	-.0639	-.0594	-.0610	-.0594	.0161	-.0926
24.000									-.0649	-.0678	-.0655	-.0914
45.000	.1469	.0138	-.0340	-.0627	-.0616	-.0667	-.0667	-.0582	-.0610	-.0543	-.0604	-.0931
67.500		-.0149	-.0554	-.0695	-.0684	-.0717	-.0678	-.0695	-.0639	-.0605	-.0576	-.0926
90.000	.0842	-.0097	-.0526	-.0667	9.9990	-.0605	-.0593	-.0661	-.0610	-.0610	-.0621	-.0903
112.500		-.0165	-.0559	-.0712	-.0717	-.0740	-.0667	-.0667	-.0661	-.0650	-.0627	-.0847
135.000	.1131	-.0002	-.0559	-.0740	-.0751	-.0728	-.0678	-.0678	9.9990	-.0683	-.0705	-.0864
157.500		.0681	-.0191	-.0615	-.0705	-.0722	-.0655	-.0706	-.0497	-.0700	-.0745	-.0847
180.000	.4129	.1875	.0612	-.0165	-.0356	-.0514	-.0548	-.0576	-.0570	-.0593	-.0610	-.0854
202.500		.3881	.1864	.0561	.0359	.0189	.0133	.0088	.0099	.0133	.0149	-.0852

MSFC 696 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A019)

MACH (2) = 3.480 ALPHA (1) = 24.660

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.9339	.6085	.3476	.1678	.1475	.1294	.1272	.1163	.1187	.1289	.1215	-.0723
247.500		.8002	.4952	.2684	.2388	.2269	.2309	.2337	.2292	.2303	.2715	-.0616
270.000	1.2708	.8870	.5640	.3132	9.9990	.2788	.2827	.2822	.2765	.2839	.2968	-.0362
292.500		.8250	.5229	.2839	.2568	.2675	.2602	.2613	.2033	.2856	.4324	-.0424
315.000	1.0499	.6775	.4015	.2026	.1685	.2336	.2099	.2217	.2262	.2285	.5324	-.0632
326.000									.2426	.2247	.4595	-.0678
346.000		.1632	.0251	-.0272	-.0317	-.0616	-.0689	-.0525	-.0582	-.0593	.0392	-.0880
360.000	.1807	.1845	.1028	-.0357	-.0379	-.0497	-.0593	-.0520	-.0554	-.0554	.0257	-.0886

MACH (3) = 4.960 ALPHA (1) = 24.510 BETA = .00000 Q(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2153	.1612	.1044	.0603	.0603	.0629	.0440	.0490	.0402	.0452	.0616	-.0076
14.000		.1409	.0830	.0565	.0439	.0376	.0364	.0326	.0275	.0351	.0364	-.0127
24.000									-.0001	-.0064	-.0001	-.0127
45.000	.1409	.0641	.0439	.0389	.0351	.0326	.0263	.0238	.0200	.0250	-.0190	-.0177
67.500		.0439	.0301	.0250	.0263	.0275	.0288	.0187	.0225	.0200	-.0152	-.0127
90.000	.0905	.0414	.0313	.0263	9.9990	.0200	.0263	.0200	.0187	.0162	-.0215	-.0152
112.500		.0338	.0212	.0187	.0200	.0137	.0212	.0152	.0162	.0162	-.0001	-.0051
135.000	.1283	.0464	.0200	.0175	.0137	.0162	.0149	.0137	9.9990	.0124	-.0264	-.0101
157.500		.0956	.0351	.0175	.0162	.0074	.0124	.0074	.0603	.0074	-.0051	-.0089
180.000	.4357	.2014	.0880	.0351	.0238	.0149	.0162	.0112	.0149	.0035	-.0001	-.0127
202.500		.3879	.1954	.0868	.0628	.0452	.0515	.0452	.0527	.0540	.0540	-.0101
225.000	.9498	.6020	.3375	.1712	.1447	.1295	.1422	.1435	.1460	.1549	.1561	-.0076
247.500		.7850	.4735	.2568	.2315	.2241	.2417	.2480	.2531	.2591	.3211	.0086
270.000	1.2673	.8616	.5391	.3050	9.9990	.2707	.2909	.2984	.2984	.3085	.3375	.0238
292.500		.7986	.5113	.2795	.2367	.2543	.2694	.2720	.2921	.3009	.4710	.0162
315.000	1.0191	.6575	.3979	.2052	.1787	.2329	.2241	.2455	.2291	.2379	.5567	.0036
326.000									.2519	.2619	.5391	.0074
346.000		.1737	.0704	.0250	.0225	.0175	.0049	.0212	.0074	.0074	.1357	-.0101
360.000	.2153	.1612	.1044	.0603	.0603	.0629	.0440	.0490	.0402	.0452	.0616	-.0076

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A020) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 90.000

MACH (1) = 1.960 ALPHA (1) = 28.930 BETA = .00000 Q(PSI) = 10.265 PO = 28.006 P = 3.8340

SECTION (1)AFT DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0149	.0820	.0308	-.2178	-.2242	-.2887	-.2955	-.2582	-.2205	-.1756	-.1343	-.3001
14.000		.1131	-.0526	-.1760	-.2274	-.2553	-.2746	-.2568	-.2085	-.1526	-.1904	-.3012
24.000									-.1839	-.1534	-.1395	-.2768
45.000	.0654	-.1187	-.2254	-.2872	-.2615	-.2137	-.1783	-.2122	-.2389	-.1900	-.0984	-.2688
67.500		-.1102	-.2061	-.2762	-.2785	-.2710	-.2072	-.1944	-.2336	-.2445	-.1444	-.2724
90.000	.0578	-.0942	-.1779	-.2253	9.9990	-.1831	-.2065	-.1824	-.1748	-.1858	-.1946	-.2606
112.500		-.1127	-.2100	-.2759	-.2899	-.2703	-.2477	-.2168	-.1836	-.1908	-.1692	-.2554
135.000	-.0084	-.1444	-.2308	-.2877	-.2885	-.2357	-.2217	-.2067	9.9990	-.1867	-.1855	-.2488
157.500		-.0732	-.1889	-.2621	-.2855	-.2270	-.2074	-.1965	-.1803	-.1908	-.1790	-.2606
180.000	.3285	.0986	-.0577	-.1629	-.1859	-.2209	-.2217	-.2092	-.2036	-.1983	-.1965	-.2449
202.500		.3515	.1412	-.0204	-.0336	-.0649	-.0962	-.0977	-.1109	-.0973	-.0950	-.2619
225.000	.9623	.6567	.3765	.1673	.1820	.1409	.1190	.0903	.0832	.1009	.0957	-.2316
247.500		.8935	.5824	.3207	.3507	.3207	.2981	.2902	.2721	.2868	.4136	-.1993
270.000	1.3590	.9996	.6787	.3988	9.9990	.4127	.3882	.3732	.3570	.3807	.3919	-.1553
292.500		.9239	.6101	.3554	.3720	.3652	.3468	.3438	.3900	.2858	.6299	-.2505
315.000	1.1135	.7422	.4524	.2220	.2231	.2871	.2675	.2657	.2736	.2595	.6719	-.2338
326.000									.2891	.3142	.6000	-.2815
346.000		.0285	-.1464	-.2157	-.2123	-.2785	-.2875	-.2371	-.1980	-.1761	-.1511	-.3007
360.000	.0149	.0820	.0308	-.2178	-.2242	-.2887	-.2955	-.2582	-.2205	-.1756	-.1343	-.3001

MACH (2) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(PSI) = 6.8630 PO = 60.023 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1435	.1153	.0421	-.0435	-.0424	-.0537	-.0576	-.0559	-.0576	-.0821	.0364	-.0880
14.000		.1300	.0375	-.0283	-.0537	-.0570	-.0599	-.0632	-.0861	-.0649	.0200	-.0920
24.000									-.0745	-.0824	-.0554	-.0909
45.000	.0938	-.0108	-.0480	-.0644	-.0644	-.0661	-.0678	-.0678	-.0621	-.0694	-.0824	-.0931
67.500		-.0300	-.0582	-.0717	-.0694	-.0734	-.0694	-.0717	-.0621	-.0678	-.0740	-.0886
90.000	.0556	-.0221	-.0531	-.0666	9.9990	-.0661	-.0656	-.0678	-.0632	-.0610	-.0728	-.0890
112.500		-.0345	-.0632	-.0734	-.0728	-.0723	-.0679	-.0672	-.0655	-.0638	-.0549	-.0830
135.000	.0662	-.0255	-.0638	-.0756	-.0762	-.0717	-.0627	-.0561	9.9990	-.0672	-.0699	-.0852
157.500		.0454	-.0306	-.0649	-.0740	-.0717	-.0627	-.0678	-.0441	-.0694	-.0717	-.0818
180.000	.3868	.1796	.0635	-.0148	-.0334	-.0458	-.0480	-.0508	-.0508	-.0520	-.0509	-.0841
202.500		.4101	.2106	.0793	.0545	.0404	.0387	.0336	.0359	.0404	.0442	-.0774

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A020)

MACH (2) = 3.480 ALPHA (1) = 28.700

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.9924	.6764	.4071	.2150	.1958	.1812	.1851	.1716	.1761	.1896	.1807	-.0610
247.500		.9097	.5913	.3440	.3265	.3192	.3248	.3276	.3203	.3231	.3667	-.0520
270.000	1.3931	1.0167	.6809	.4082	9.9990	.3879	.3975	.3953	.3851	.3958	.4054	-.0131
292.500		.9383	.6255	.3662	.3397	.3667	.3622	.3656	.3887	.3927	.5922	-.0255
315.000	1.1316	.7575	.4741	.2605	.2527	.3220	.3012	.3153	.3130	.3175	.6911	-.0537
326.000									.3357	.3237	.6105	-.0571
346.000		.1368	.0105	-.0362	-.0368	-.0537	-.0621	-.0492	-.0559	-.0593	.0607	-.0847
360.000	.1435	.1153	.0421	-.0435	-.0424	-.0537	-.0576	-.0559	-.0576	-.0621	.0364	-.0880

MACH (3) = 4.960 ALPHA (1) = 28.540 BETA = .00000 Q(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1737	.1473	.0931	.0641	.0666	.0666	.0515	.0528	.0477	.0503	.0994	-.0064
14.000		.1372	.0754	.0565	.0401	.0439	.0427	.0351	.0288	.0389	.0477	-.0089
24.000									.0036	-.0081	.0086	-.0101
45.000	.1057	.0590	.0477	.0414	.0389	.0389	.0326	.0288	.0250	.0301	-.0152	-.0177
67.500		.0427	.0364	.0301	.0301	.0275	.0364	.0225	.0250	.0263	-.0114	-.0139
90.000	.0641	.0414	.0351	.0275	9.9990	.0200	.0288	.0225	.0200	.0200	-.0152	-.0101
112.500		.0301	.0187	.0200	.0175	.0187	.0250	.0175	.0149	.0175	.0036	-.0001
135.000	.0918	.0401	.0275	.0200	.0175	.0149	.0200	.0175	9.9990	.0137	.0023	-.0051
157.500		.0830	.0376	.0212	.0200	.0149	.0225	.0124	.0729	.0149	-.0026	-.0076
180.000	.4181	.2014	.0943	.0414	.0275	.0175	.0225	.0175	.0225	.0124	.0099	-.0101
202.500		.4143	.2193	.1044	.0817	.0729	.0779	.0716	.0767	.0830	.0859	.0064
225.000	1.0178	.6751	.4042	.2228	.1951	.1954	.2077	.2027	.2090	.2203	.2190	.0023
247.500		.9145	.5894	.3413	.3148	.3312	.3501	.3551	.3526	.3551	.4219	.0175
270.000	1.4172	1.0241	.6751	.4017	9.9990	.3967	.4156	.4231	.4181	.4244	.4458	.0490
292.500		.9460	.6247	.3527	.3211	.3677	.3853	.3891	.4055	.4105	.6272	.0389
315.000	1.1299	.7583	.4773	.2669	.2430	.3299	.3337	.3576	.3337	.3400	.7444	.0212
326.000									.3753	.3639	.6814	.0162
346.000		.1661	.0704	.0288	.0301	.0288	.0200	.0351	.0187	.0162	.1310	-.0089
350.000	.1737	.1473	.0931	.0641	.0666	.0666	.0515	.0528	.0477	.0503	.0994	-.0064

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A021) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8650 PO = 60.036 P = .81000

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3524	.1418	.0150	-.0351	-.0176	-.0289	-.0322	-.0339	-.0198	.0246	.0826	-.0667
14.000		.1688	.0302	-.0317	-.0216	-.0334	-.0424	-.0390	-.0176	-.0081	.0702	-.0779
24.000									-.0137	-.0086	.0318	-.0813
45.000	.5198	.2352	.0735	-.0143	-.0148	-.0092	-.0069	-.0092	-.0148	.0059	.0296	-.0836
67.500		.3051	.1197	.0093	-.0069	-.0047	-.0069	-.0109	-.0097	.0054	.0042	-.0913
90.000	.6967	.3688	.1603	.0330	9.9990	.0087	.0093	.0042	.0020	.0031	.0245	-.0919
112.500		.4150	.1885	.0510	.0397	.0228	.0217	.0189	.0166	.0161	.0504	-.0751
135.000	.7840	.4358	.2020	.0572	.0403	.0302	.0302	.0262	9.9990	.0240	.0257	-.0672
157.500		.4110	.1885	.0510	.0358	.0257	.0228	.0200	.0285	.0161	.0172	-.0561
180.000	.6837	.3504	.1610	.0342	.0218	.0094	.0077	.0026	-.0001	-.0029	-.0041	-.0655
202.500		.3095	.1175	.0104	-.0007	-.0103	-.0165	-.0210	-.0261	-.0266	-.0283	-.0616
225.000	.5046	.2388	.0810	-.0120	-.0210	-.0317	-.0362	-.0407	-.0418	-.0390	-.0435	-.0610
247.500		.1862	.0448	-.0317	-.0340	-.0396	-.0368	-.0368	-.0379	-.0368	-.0357	-.0533
270.000	.3761	.1451	.0189	-.0441	9.9990	-.0362	-.0345	-.0374	-.0379	-.0369	-.0244	-.0712
292.500		.1192	.0065	-.0531	-.0278	-.0182	-.0283	-.0289	-.0295	-.0328	-.0002	-.0762
315.000	.3276	.1103	-.0024	-.0554	-.0390	-.0272	-.0299	-.0221	-.0283	-.0165	.0797	-.0813
326.000									.0014	-.0097	.0765	-.0913
346.000		.1406	.0200	-.0419	-.0283	-.0430	-.0323	-.0317	-.0154	.0369	.1034	-.0723
360.000	.3524	.1418	.0150	-.0351	-.0176	-.0289	-.0322	-.0339	-.0199	.0246	.0826	-.0667

MACH (2) = 4.960 ALPHA (1) = -8.310 BETA = .00000 Q(PSI) = 3.0700 PO = 90.027 P = .17800

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3375	.1471	.0665	.0476	.0539	.0539	.0388	.0388	.0375	.0413	.0112	-.0026
14.000		.1687	.0603	.0439	.0364	.0376	.0288	.0263	.0275	.0313	.0641	-.0051
24.000									.0074	.0086	.0187	-.0114
45.000	.4912	.2329	.0893	.0452	.0376	.0376	.0351	.0288	.0250	.0288	.0162	-.0089
67.500		.2934	.1220	.0477	.0376	.0376	.0364	.0263	.0298	.0263	.0149	-.0139
90.000	.6575	.3476	.1523	.0616	9.9990	.0389	.0401	.0326	.0298	.0288	.0212	-.0039
112.500		.3866	.1800	.0716	.0553	.0414	.0452	.0401	.0364	.0364	.0464	-.0001
135.000	.7621	.4017	.1926	.0754	.0565	.0464	.0477	.0414	9.9990	.0351	.0351	.0011
157.500		.3866	.1925	.0704	.0527	.0414	.0414	.0351	.0817	.0313	.0301	.0023
180.000	.6499	.3337	.1523	.0553	.0376	.0338	.0289	.0238	.0263	.0187	.0187	.0049
202.500		.2921	.1220	.0414	.0288	.0263	.0187	.0124	.0137	.0137	.0074	.0061

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A021)

MACH (2) = 4.960 ALPHA (1) = -8.310

SECTION ( ) TANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4824	.2329	.0893	.0250	.0175	.0137	.0124	.0061	.0074	.0036	.0086	.0074
247.500		.1838	.0603	.0149	.0086	.0086	.0049	.0074	.0036	.0049	.0074	.0112
270.000	.3602	.1485	.0439	.0112	9.9990	.0074	.0099	.0086	.0061	.0023	.0086	.0086
292.500		.1233	.0275	.0011	.0124	.0162	.0074	.0061	.0036	.0061	.0086	.0086
315.000	.3173	.1157	.0275	.0036	.0112	.0049	.0074	.0074	.0023	.0074	.0187	-.0001
326.000									.0006	.0175	.0200	-.0001
348.000		.1422	.0326	.0061	.0086	.0036	.0049	.0061	-.0001	.0049	.0275	.0011
360.000	.3375	.1471	.0665	.0476	.0539	.0539	.0388	.0388	.0375	.0413	.0112	-.0026

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MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A022) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 6.8650 PO = 60.039 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4324	.1903	.0449	-.0249	-.0052	-.0187	-.0238	-.0204	-.0120	.0556	.1243	-.0712
14.000		.2063	.0527	-.0221	-.0024	-.0317	-.0295	-.0227	-.0131	.0426	.1468	-.0807
24.000									-.0058	.0262	.1107	-.0824
45.000	.5367	.2443	.0792	-.0131	-.0030	-.0035	-.0058	-.0154	-.0148	-.0114	.1068	-.0824
67.500		.2811	.1035	-.0018	-.0069	-.0035	-.0058	-.0058	-.0018	-.0063	.0397	-.0774
90.000	.6184	.3081	.1204	.0082	9.9990	-.0035	.0015	-.0007	-.0024	.0003	.0189	-.0757
112.500		.3260	.1282	.0155	.0082	.0020	.0020	.0014	-.0002	.0020	.0240	-.0633
135.000	.6584	.3378	.1372	.0172	.0093	.0037	.0037	.0026	9.9990	.0020	.0037	-.0599
157.500		.3226	.1289	.0144	.0059	.0020	.0009	-.0002	.0121	-.0019	-.0013	-.0565
180.000	.6088	.2894	.1149	.0075	-.0003	-.0048	-.0043	-.0076	-.0082	-.0116	-.0086	-.0531
202.500		.2781	.1000	-.0036	-.0092	-.0114	-.0131	-.0148	-.0165	-.0148	-.0159	-.0548
225.000	.5187	.2426	.0797	-.0137	-.0182	-.0199	-.0193	-.0193	-.0204	-.0188	-.0199	-.0582
247.500		.2144	.0600	-.0238	-.0250	-.0233	-.0193	-.0176	-.0188	-.0171	-.0126	-.0610
270.000	.4533	.1930	.0465	-.0312	9.9990	-.0221	-.0165	-.0165	-.0182	-.0159	-.0064	-.0689
292.500		.1740	.0347	-.0373	-.0159	-.0097	-.0142	-.0153	-.0108	-.0165	.0240	-.0689
315.000	.4386	.1710	.0296	-.0396	-.0255	-.0176	-.0250	-.0188	-.0272	-.0131	.0955	-.0678
326.000									.0127	-.0058	.0792	-.0689
346.000		.2043	.0516	-.0295	-.0131	-.0407	-.0210	-.0210	-.0114	.0527	.1147	-.0757
360.000	.4324	.1903	.0449	-.0249	-.0052	-.0187	-.0238	-.0204	-.0120	.0556	.1243	-.0712

MACH (2) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0700 PO = 90.023 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4005	.1800	.0968	.0716	.0767	.0716	.0603	.0616	.0603	.0641	.0288	.0011
14.000		.1938	.0855	.0666	.0565	.0565	.0477	.0452	.0452	.0540	.1586	-.0039
24.000									.0162	.0200	.0301	-.0101
45.000	.5038	.2304	.0981	.0590	.0565	.0527	.0452	.0414	.0427	.0464	.0464	-.0101
67.500		.2594	.1057	.0515	.0464	.0490	.0477	.0376	.0401	.0401	.0225	-.0051
90.000	.5768	.2858	.1220	.0565	9.9990	.0389	.0464	.0376	.0351	.0364	.0124	-.0039
112.500		.3022	.1258	.0527	.0439	.0351	.0389	.0351	.0313	.0326	.0275	.0099
135.000	.6159	.3110	.1359	.0540	.0427	.0326	.0376	.0338	9.9990	.0275	.0187	.0124
157.500		.3022	.1283	.0502	.0401	.0338	.0338	.0288	.0880	.0275	.0061	.0099
180.000	.5718	.2757	.1208	.0452	.0351	.0275	.0275	.0238	.0301	.0187	.0137	.0137
202.500		.2606	.1057	.0364	.0288	.0250	.0212	.0187	.0187	.0187	.0137	.0137

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A022)

MACH (2) = 4.960 ALPHA (1) = -4.290

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1820	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4924	.2304	.0905	.0301	.0238	.0187	.0200	.0149	.0162	.0137	.0149	.0124
247.500		.2064	.0767	.0263	.0187	.0162	.0137	.0137	.0137	.0137	.0149	.0149
270.000	.4357	.1850	.0616	.0175	9.9990	.0124	.0124	.0112	.0099	.0124	.0162	.0175
292.500		.1699	.0565	.0124	.0275	.0225	.0137	.0124	.0137	.0149	.0124	.0149
315.000	.4194	.1649	.0477	.0124	.0175	.0099	.0124	.0099	.0036	.0124	.0301	.0049
326.000									.0149	.0187	.0339	-.0013
346.000		.1913	.0666	.0175	.0238	.0074	.0112	.0086	.0099	.0200	.0389	-.0013
360.000	.4005	.1800	.0968	.0716	.0767	.0716	.0603	.0616	.0603	.0541	.0288	.0011

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A023) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8650 PO = 60.037 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5068	.2534	.0798	-.0131	.0094	-.0120	-.0187	-.0159	-.0035	.0511	.1558	-.0650
14.000		.2523	.0787	-.0125	.0077	-.0187	-.0232	-.0176	-.0080	.0511	.1941	-.0728
24.000									.0026	.0488	.1412	-.0796
45.000	.5446	.2533	.0809	-.0137	.0009	-.0035	-.0137	-.0159	-.0131	-.0013	.1006	-.0768
67.500		.2533	.0842	-.0137	-.0109	-.0092	-.0109	-.0126	-.0052	-.0126	.0375	-.0705
90.000	.5423	.2520	.0830	-.0115	9.9990	-.0098	-.0058	-.0092	-.0104	-.0081	.0071	-.0706
112.500		.2499	.0831	-.0131	-.0148	-.0131	-.0081	-.0086	-.0086	-.0081	.0166	-.0655
135.000	.5418	.2510	.0797	-.0159	-.0182	-.0143	-.0092	-.0092	9.9990	-.0081	-.0092	-.0621
157.500		.2461	.0821	-.0142	-.0170	-.0159	-.0097	-.0086	.0065	-.0069	-.0114	-.0582
180.000	.5316	.2358	.0786	-.0143	-.0171	-.0137	-.0097	-.0081	-.0069	-.0081	-.0114	-.0565
202.500		.2505	.0775	-.0165	-.0188	-.0159	-.0103	-.0103	-.0092	-.0086	-.0114	-.0598
225.000	.5254	.2448	.0792	-.0154	-.0188	-.0159	-.0103	-.0097	-.0081	-.0081	-.0086	-.0616
247.500		.2465	.0809	-.0148	-.0154	-.0148	-.0086	-.0069	-.0075	-.0075	.0110	-.0700
270.000	.5282	.2454	.0775	-.0143	9.9990	-.0154	-.0064	-.0058	-.0092	-.0075	.0037	-.0751
292.500		.2371	.0759	-.0170	-.0012	-.0052	-.0018	-.0125	-.0046	-.0131	.0268	-.0734
315.000	.5502	.2431	.0786	-.0171	-.0064	.0014	-.0154	-.0159	-.0114	-.0165	.0695	-.0768
326.000									.0195	.0116	.0482	-.0796
346.000		.2764	.0972	-.0041	.0087	-.0497	-.0165	-.0171	.0093	.0617	.1107	-.0768
360.000	.5068	.2534	.0798	-.0131	.0094	-.0120	-.0187	-.0159	-.0035	.0511	.1558	-.0650

MACH (2) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4546	.2241	.1069	.0716	.0792	.0805	.0590	.0868	.0616	.0691	.0540	-.0039
14.000		.2266	.0981	.0653	.0628	.0540	.0502	.0565	.0502	.0590	.1321	-.0101
24.000									.0200	.0301	.0767	-.0114
45.000	.5013	.2267	.0918	.0540	.0540	.0477	.0414	.0465	.0364	.0427	.0427	-.0114
67.500		.2253	.0943	.0439	.0464	.0414	.0464	.0427	.0376	.0351	.0225	-.0064
90.000	.5000	.2241	.0869	.0401	9.9990	.0376	.0389	.0401	.0288	.0326	.0074	-.0039
112.500		.2279	.0868	.0376	.0364	.0338	.0364	.0414	.0276	.0301	.0175	.0086
135.000	.4975	.2291	.0918	.0364	.0351	.0275	.0313	.0376	9.9990	.0250	.0112	.0137
157.500		.2279	.0868	.0326	.0301	.0275	.0275	.0326	.0918	.0238	.0086	.0137
180.000	.4975	.2203	.0890	.0313	.0250	.0200	.0238	.0288	.0263	.0137	.0112	.0162
202.500		.2304	.0893	.0288	.0288	.0187	.0212	.0275	.0200	.0187	.0099	.0162

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A023)

MACH (2) = 4.960 ALPHA (1) = -.280

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4912	.2291	.0842	.0238	.0200	.0200	.0187	.0238	.0149	.0124	.0086	.0112
247.500		.2354	.0842	.0212	.0175	.0162	.0137	.0212	.0099	.0086	.0162	.0023
270.000	.4975	.2342	.0855	.0225	9.9990	.0112	.0162	.0225	.0099	.0074	.0149	-.0013
292.500		.2329	.0830	.0187	.0301	.0225	.0212	.0212	.0086	.0086	.0187	-.0001
315.000	.5252	.2266	.0792	.0200	.0263	.0162	.0162	.0212	.003ω	.0086	.0338	-.0064
326.000									.0175	.0225	.0376	-.0089
346.000		.2531	.0968	.0250	.0313	.0112	.0112	.0162	.0124	.0225	.0452	-.0089
360.000	.4546	.2241	.1069	.0716	.0792	.0805	.0590	.0868	.0616	.0691	.0540	-.0039

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A024) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 3.720 BETA = .00000 Q(PSI) = 6.8640 PO = 60.035 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5939	.3228	.1215	.0054	.0026	-.0266	-.0125	-.0120	-.0058	.0640	.1497	-.0655
14.000		.2989	.1090	.0009	.0020	-.0328	-.0199	-.0126	-.0109	.0527	.1817	-.0644
24.000									-.0018	.0583	.1547	-.0813
45.000	.5434	.2482	.0842	-.0126	-.0019	-.0131	-.0323	-.0278	-.0210	-.0035	.0578	-.0830
67.500		.2223	.0690	-.0210	-.0176	-.0131	-.0255	-.0261	-.0159	-.0176	.0358	-.0751
90.000	.4634	.1975	.0533	-.0283	9.9990	-.0261	-.0143	-.0227	-.0193	-.0143	.0054	-.0683
112.500		.1840	.0409	-.0340	-.0334	-.0233	-.0188	-.0143	-.0148	-.0131	.0111	-.0644
135.000	.4315	.1795	.0380	-.0362	-.0328	-.0233	-.0148	-.0114	9.9990	-.0081	-.0035	-.0650
157.500		.1800	.0409	-.0351	-.0328	-.0221	-.0159	-.0143	.0042	-.0092	-.0075	-.0655
180.000	.4513	.1834	.0448	-.0323	-.0317	-.0250	-.0188	-.0171	-.0154	-.0154	-.0136	-.0689
202.500		.2144	.0600	-.0255	-.0278	-.0266	-.0199	-.0204	-.0188	-.0176	-.0171	-.0678
225.000	.5192	.2405	.0764	-.0193	-.0210	-.0227	-.0210	-.0215	-.0204	-.0204	-.0199	-.0683
247.500		.2707	.0944	-.0058	-.0114	-.0131	-.0114	-.0137	-.0178	-.0171	.0020	-.0706
270.000	.6049	.2989	.1147	.0054	9.9990	-.0052	-.0013	-.0058	-.0114	-.0103	.0065	-.0740
292.500		.3136	.1265	.0121	.0211	.0082	.0121	-.0041	-.0002	-.0075	.0352	-.0824
315.000	.6632	.3248	.1316	.0149	.0195	.0245	.0020	-.0058	-.0058	-.0126	.0866	-.0762
326.000									.0341	.0189	.0668	-.0813
346.000		.3549	.1475	.0274	.0246	-.0356	-.0029	-.0114	.0060	.0776	.1316	-.0774
360.000	.5939	.3228	.1215	.0054	.0026	-.0266	-.0125	-.0120	-.0058	.0640	.1497	-.0655

MACH (2) = 4.960 ALPHA (1) = 3.730 BETA = .00000 Q(PSI) = 3.0700 PO = 90.017 P = .17800

SECTION (1 .NK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5731	.3123	.1372	.0830	.0817	.0716	.0616	.0603	.0653	.0742	.0767	-.0001
14.000		.2820	.1195	.0729	.0628	.0515	.0515	.0439	.0515	.0641	.0868	-.0064
24.000									.0301	.0401	.0842	-.0101
45.000	.5189	.2392	.1057	.0603	.0565	.0376	.0427	.0364	.0389	.0439	.0364	-.0139
67.500		.2090	.0868	.0439	.0427	.0275	.0439	.0301	.0376	.0376	.0187	-.0089
90.000	.4345	.1838	.0716	.0414	9.9990	.0313	.0376	.0288	.0288	.0326	.0061	-.0101
112.500		.1762	.0679	.0364	.0275	.0238	.0338	.0288	.0289	.0301	.0200	-.0039
135.000	.4030	.1687	.0641	.0326	.0250	.0200	.0288	.0263	9.9990	.0238	.0112	-.0064
157.500		.1715	.0617	.0264	.0251	.0214	.0277	.0214	.0895	.0239	.0074	-.0039
180.000	.4257	.1787	.0666	.0288	.0187	.0162	.0238	.0187	.0263	.0137	.0049	-.0076
202.500		.2052	.0754	.0288	.0225	.0112	.0187	.0137	.0187	.0162	.0061	-.0064

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A024)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

MACH (2) = 4.960 ALPHA (1) = 3.730

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5013	.2316	.0905	.0313	.0225	.0137	.0212	.0137	.0162	.0112	.0074	-.0089
247.500		.2657	.1057	.0338	.0212	.0137	.0187	.0137	.0112	.0086	.0187	-.0064
270.000	.5907	.2972	.1246	.0414	9.9990	.0175	.0225	.0175	.0175	.0149	.0175	-.0064
292.500		.3085	.1296	.0427	.0351	.0263	.0263	.0200	.0162	.0162	.0364	-.0064
315.000	.6487	.3186	.1409	.0477	.0452	.0250	.0313	.0212	.0124	.0212	.0565	-.0089
326.000									.0364	.0401	.0590	-.0114
346.000		.3413	.1485	.0515	.0376	.0124	.0175	.0112	.0200	.0364	.1145	-.0139
360.000	.5731	.3123	.1372	.0830	.0817	.0716	.0616	.0603	.0653	.0742	.0767	-.0001

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A025) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 7.710 BETA = .00000 Q(PSI) = 6.6650 PO = 60.036 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7001	.3943	.1649	.0330	.0212	-.0142	.0020	-.0007	.0003	.0635	.1845	-.0689
14.000		.3504	.1452	.0206	.0127	-.0148	-.0046	-.0052	-.0035	.0646	.1631	-.0757
24.000									.0087	.0702	.1651	-.0858
45.000	.5356	.2405	.0849	-.0108	-.0024	-.0480	-.0469	-.0492	-.0379	-.0165	-.0126	-.0864
67.500		.1913	.0504	-.0289	-.0250	-.0328	-.0458	-.0481	-.0452	-.0238	-.0052	-.0779
90.000	.3812	.1479	.0228	-.0407	9.9990	-.0424	-.0441	-.0424	-.0317	-.0261	.0020	-.0712
112.500		.1237	.0071	-.0469	-.0435	-.0379	-.0233	-.0227	-.0216	-.0199	-.0002	-.0650
135.000	.3322	.1169	.0054	-.0497	-.0419	-.0312	-.0154	-.0081	9.9990	-.0092	-.0069	-.0712
157.500		.1203	.0059	-.0497	-.0430	-.0362	-.0334	-.0407	-.0058	-.0244	-.0221	-.0706
180.000	.3699	.1339	.0173	-.0446	-.0452	-.0396	-.0339	-.0368	-.0311	-.0317	-.0306	-.0740
202.500		.1812	.0386	-.0345	-.0407	-.0458	-.0385	-.0430	-.0441	-.0424	-.0424	-.0751
225.000	.4984	.2313	.0741	-.0159	-.0250	-.0374	-.0357	-.0458	-.0509	-.0503	-.0509	-.0751
247.500		.2950	.1124	.0059	-.0041	-.0148	-.0171	-.0255	-.0323	-.0317	-.0081	-.0728
270.000	.6770	.3569	.1530	.0307	9.9990	.0093	.0093	-.0024	-.0075	-.0052	.0155	-.0802
292.500		.3953	.1845	.0482	.0426	.0290	.0290	.0121	.0155	.0082	.0578	-.0841
315.000	.7818	.4172	.1981	.0572	.0476	.0521	.0262	.0166	.0206	.0104	.1293	-.0841
326.000									.0695	.0527	.0961	-.0779
346.000		.4370	.2026	.0685	.0493	-.0171	.0183	.0042	.0285	.1017	.1812	-.0824
360.000	.7001	.3943	.1649	.0330	.0212	-.0142	.0020	-.0007	.0003	.0635	.1845	-.0689

MACH (2) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(PSI) = 3.0700 PO = 90.016 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6676	.3906	.1801	.0894	.0793	.0642	.0629	.0604	.0654	.0818	.1346	.0023
14.000		.3453	.1537	.0742	.0692	.0440	.0541	.0452	.0528	.0654	.1183	-.0064
24.000									.0376	.0490	.1233	-.0089
45.000	.5214	.2406	.1057	.0553	.0515	.0314	.0314	.0276	.0364	.0364	.0112	-.0114
67.500		.1863	.0729	.0389	.0351	.0288	.0351	.0225	.0288	.0263	-.0026	-.0089
90.000	.3602	.1472	.0553	.0326	9.9990	.0238	.0301	.0225	.0225	.0238	-.0051	-.0089
112.500		.1233	.0452	.0275	.0250	.0162	.0275	.0225	.0212	.0238	.0086	-.0013
135.000	.3098	.1170	.0376	.0238	.0162	.0149	.0212	.0200	9.9990	.0162	.0061	-.0064
157.500		.1183	.0376	.0212	.0162	.0149	.0200	.0137	.0905	.0149	-.0013	-.0089
180.000	.3539	.1346	.0490	.0212	.0149	.0086	.0187	.0124	.0212	.0074	-.0013	-.0089
202.500		.1775	.0578	.0225	.0137	.0099	.0112	.0086	.0137	.0099	-.0001	-.0076

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A025)

MACH (2) = 4.980 ALPHA (1) = 7.750

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4849	.2266	.0880	.0263	.0187	.0086	.0149	.0061	.0086	.0049	-.0001	-.0101
247.500		.2883	.1208	.0389	.0212	.0112	.0175	.0086	.0086	.0036	.0187	-.0026
270.000	.6751	.3501	.1548	.0553	9.9990	.0250	.0263	.0225	.0175	.0175	.0313	-.0064
292.500		.3942	.1850	.0691	.0553	.0414	.0427	.0326	.0288	.0275	.0565	-.0076
315.000	.7772	.4168	.2039	.0805	.0691	.0527	.0515	.0364	.0288	.0427	.0956	-.0127
326.000									.0603	.0590	.0968	-.0114
346.000		.4257	.2115	.0880	.0616	.0351	.0301	.0275	.0477	.0666	.1498	-.0190
360.000	.6676	.3906	.1801	.0894	.0793	.0642	.0629	.0604	.0654	.0818	.1346	.0023

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A026) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(PSI) = 6.8630 PO = 60.026 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8071	.4671	.2140	.0618	.0449	.0082	.0240	.0212	.0280	.1328	.2093	-.0543
14.000		.3927	.1751	.0375	.0251	.0274	.0156	.0127	.0060	.0934	.2123	-.0435
24.000									.0223	.1024	.2354	-.0875
45.000	.5291	.2405	.0815	-.0120	-.0058	-.0520	-.0610	-.0593	-.0136	-.0103	-.0295	-.0948
67.500		.1621	.0353	-.0362	-.0384	-.0525	-.0593	-.0632	-.0514	-.0345	-.0323	-.0931
90.000	.3092	.1051	.0003	-.0514	9.9990	-.0514	-.0565	-.0514	-.0492	-.0350	-.0227	-.0836
112.500		.0759	-.0182	-.0587	-.0520	-.0548	-.0358	-.0508	-.0486	-.0480	-.0312	-.0712
135.000	.2493	.0702	-.0210	-.0593	-.0509	-.0334	-.0182	-.0233	9.9990	-.0250	-.0238	-.0790
157.500		.0714	-.0210	-.0610	-.0537	-.0587	-.0621	-.0548	-.0294	-.0570	-.0587	-.0773
180.000	.2978	.0905	-.0091	-.0576	-.0597	-.0565	-.0565	-.0593	-.0570	-.0599	-.0616	-.0779
202.500		.1468	.0189	-.0452	-.0543	-.0616	-.0599	-.0610	-.0582	-.0565	-.0576	-.0774
225.000	.4727	.2185	.0669	-.0204	-.0322	-.0503	-.0531	-.0610	-.0649	-.0638	-.0633	-.0802
247.500		.3121	.1249	.0144	-.0018	-.0170	-.0204	-.0284	-.0356	-.0345	-.0035	-.0768
270.000	.7387	.4084	.1892	.0539	9.9990	.0240	.0212	.0094	.0043	.0071	.0342	-.0830
292.500		.4750	.2444	.0872	.0764	.0567	.0539	.0404	.0449	.0359	.0939	-.0824
315.000	.8967	.5164	.2736	.1017	.0842	.0982	.0566	.0493	.0516	.0420	.2093	-.0779
326.000									.1176	.0904	.1614	-.0672
346.000		.5119	.2612	.1068	.0826	.0048	.0414	.0262	.0590	.1423	.2685	-.0734
360.000	.8071	.4671	.2140	.0618	.0449	.0082	.0240	.0212	.0280	.1328	.2093	-.0543

MACH (2) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.031 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	343	.4584	.2127	.1006	.0880	.0767	.0704	.0691	.0805	.1157	.1585	.0137
14.000		.3828	.1750	.0830	.0653	.0679	.0603	.0565	.0628	.0868	.1586	.0074
24.000									.0502	.0767	.1813	-.0139
45.000	.5176	.2316	.1069	.0540	.0527	.0301	.0326	.0313	.0401	.0351	.0111	-.0139
67.500		.1598	.0716	.0338	.0338	.0263	.0338	.0238	.0288	.0225	-.0076	-.0152
90.000	.2997	.1120	.0464	.0288	9.9990	.0187	.0288	.0212	.0175	.0200	-.0127	-.0164
112.500		.0892	.0376	.0250	.0237	.0187	.0237	.0212	.0187	.0187	.0036	-.0013
135.000	.2391	.0830	.0384	.0212	.0175	.0049	.0212	.0225	9.9990	.0162	.0036	-.0064
157.500		.0842	.0351	.0174	.0187	.0086	.0162	.0061	.1081	.0111	-.0039	-.0101
180.000	.2920	.1006	.0351	.0175	.0149	.0099	.0124	.0099	.0187	.0023	-.0051	-.0076
202.500		.1485	.0490	.0175	.0124	.0061	.0074	.0061	.0086	.0061	-.0039	-.0076

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A026)

MACH (2) = 4.960 ALPHA (1) = 12.450

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4710	.2153	.0855	.0263	.0162	.0086	.0099	.0049	.0061	-.0013	-.0064	-.0114
247.500		.3071	.1346	.0464	.0288	.0174	.0162	.0149	.0099	.0086	.0263	-.0026
270.000	.7369	.3992	.1901	.0742	9.9990	.0364	.0376	.0351	.0288	.0288	.0502	-.0076
292.500		.4735	.2430	.1006	.0830	.0590	.0641	.0540	.0540	.0490	.0943	-.0064
315.000	.8916	.5074	.2631	.1132	.0905	.0967	.0729	.0628	.0640	.0615	.1571	-.0026
326.000									.1031	.1094	.1384	-.0051
346.000		.4887	.2657	.1195	.0956	.0376	.0502	.0452	.0805	.0994	.2480	-.0177
360.000	.7643	.4584	.2127	.1006	.0880	.0767	.0704	.0691	.0805	.1157	.1585	.0137

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A027) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 16.540 BETA = .00000 Q(PSI) = 6.8650 PO = 60.037 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8888	.5516	.2799	.1080	.0776	.0308	.0505	.0607	.0934	.2106	.2645	-.0340
14.000		.4420	.2121	.0640	.0488	.0578	.0482	.0386	.0499	.1721	.2826	-.0261
24.000									.0634	.1755	.3064	-.0847
45.000	.5215	.2330	.0848	-.0095	-.0035	-.0559	-.0633	-.0582	-.0030	-.0199	-.0306	-.0909
67.500		.1344	.0206	-.0424	-.0469	-.0537	-.0644	-.0650	-.0520	-.0413	-.0486	-.0937
90.000	.2427	.0873	-.0205	-.0594	9.9990	-.0588	-.0639	-.0605	-.0598	-.0453	-.0300	-.0852
112.500		.0380	-.0340	-.0644	-.0610	-.0565	-.0616	-.0605	-.0621	-.0599	-.0447	-.0678
135.000	.1812	.0347	-.0334	-.0638	-.0548	-.0384	-.0306	-.0362	9.9990	-.0475	-.0469	-.0774
157.500		.0359	-.0362	-.0655	-.0621	-.0700	-.0678	-.0632	-.0153	-.0638	-.0666	-.0768
180.000	.2324	.0488	-.0238	-.0650	-.0678	-.0644	-.0678	-.0655	-.0582	-.0633	-.0650	-.0774
202.500		.1193	.0065	-.0520	-.0627	-.0689	-.0666	-.0638	-.0610	-.0610	-.0650	-.0785
225.000	.4479	.2074	.0621	-.0205	-.0369	-.0453	-.0582	-.0633	-.0644	-.0673	-.0695	-.0785
247.500		.3335	.1435	.0280	.0065	-.0086	-.0131	-.0221	-.0244	-.0260	.0110	-.0700
270.000	.8054	.4696	.2364	.0859	9.9990	.0504	.0459	.0347	.0324	.0341	.0724	-.0779
292.500		.5705	.3153	.1366	.1237	.1012	.0921	.0848	.0910	.0769	.1486	-.0694
315.000	1.0133	.6308	.3615	.1614	.1614	.1378	.1090	.1017	.1017	.0921	.3265	-.0638
326.000									.1903	.1406	.2561	-.0531
346.000		.5823	.3231	.1490	.1226	.0657	.0628	.0600	.1541	.1992	.3389	-.0543
360.000	.8888	.5516	.2799	.1080	.0776	.0308	.0505	.0607	.0934	.2106	.2645	-.0340

MACH (2) = 4.960 ALPHA (1) = 16.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.027 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8452	.5443	.2746	.1347	.1170	.1019	.0931	.0969	.1334	.1876	.2518	.0389
14.000		.4321	.2065	.1019	.0780	.0931	.0805	.0742	.0944	.1448	.2391	.0212
24.000									.0868	.1308	.2909	-.0101
45.000	.5137	.2354	.1107	.0628	.0590	.0502	.0364	.0389	.0502	.0464	.0250	-.0139
67.500		.1397	.0679	.0389	.0376	.0376	.0401	.0288	.0351	.0288	-.0101	-.0152
90.000	.2379	.0880	.0452	.0351	9.9990	.0364	.0326	.0275	.0263	.0275	-.0152	-.0152
112.500		.0641	.0326	.0288	.0263	.0238	.0263	.0238	.0238	.0238	.0049	.0011
135.000	.1774	.0616	.0326	.0250	.0212	.0288	.0250	.0263	8.9990	.0187	.0011	-.0051
157.500		.0603	.0288	.0212	.0212	.0238	.0187	.0162	.1208	.0162	-.0064	-.0101
180.000	.2328	.0716	.0301	.0187	.0112	.0212	.0112	.0099	.0212	.0036	-.0051	-.0089
202.500		.1246	.0452	.0187	.0124	.0124	.0074	.0061	.0112	.0049	-.0089	-.0089

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A027)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

MACH (2) = 4.960 ALPHA (1) = 16.450

DEPENDENT VARIABLE CP

SECTION (1)ANK											
X/L8	.0550	.1080	.1620	.2160	.3240	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4521	.2089	.0829	.0313	.0200	.0200	.0111	.0099	.0099	.0049	-.0039	-.0177
247.500		.3287	.1548	.0578	.0364	.0288	.0238	.0225	.0212	.0162	.0401	.0049
270.000	.8046	.4646	.2391	.1044	9.9990	.0653	.0540	.0590	.0578	.0565	.0980	.0023
292.500		.5680	.3110	.1447	.1220	.1082	.1006	.0981	.1006	.0968	.1598	-.0013
315.000	1.0153	.6235	.3513	.1649	.1422	.1296	.1233	.1132	.1246	.1094	.2366	.0049
326,000									.1737	.1824	.2203	.0061
346.000		.5643	.3249	.1573	.1334	.1069	.0716	.0729	.1447	.1661	.3525	-.0013
360.000	.8452	.5443	.2746	.1347	.1170	.1019	.0931	.0969	.1334	.1876	.2518	.0389

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A028) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PSI) = 6.8640 PO = 60.029 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.9300	.6407	.3431	.1531	.1221	.0466	.0956	.1108	.1632	.2833	.3327	.0054
14.000		.4890	.2472	.0911	.0691	.0815	.0776	.0810	.0888	.2360	.3648	-.0176
24.000									.1175	.2944	.4291	-.0841
45.000	.4989	.2252	.0860	-.0069	-.0063	-.0593	-.0649	-.0582	-.0041	-.0238	.0279	-.0796
67.500		.1045	.0054	-.0486	-.0854	-.0706	-.0695	-.0689	-.0571	-.0537	-.0768	-.0959
90.000	.1808	.0307	-.0368	-.0665	9.9990	-.0695	-.0683	-.0667	-.0627	-.0537	-.0599	-.0931
112.500		.0043	-.0508	-.0700	-.0700	-.0649	-.0717	-.0683	-.0683	-.0610	-.0452	-.0683
135.000	.1259	.0049	-.0497	-.0700	-.0548	-.0497	-.0413	-.0582	9.9990	-.0521	-.0605	-.0785
157.500		.0026	-.0514	-.0706	-.0734	-.0717	-.0723	-.0678	-.0582	-.0689	-.0700	-.0807
180.000	.1710	.0223	-.0446	-.0734	-.0751	-.0717	-.0711	-.0672	-.0666	-.0689	-.0689	-.0819
202.500		.0860	-.0131	-.0610	-.0728	-.0756	-.0705	-.0683	-.0666	-.0666	-.0678	-.0835
225.000	.4189	.1942	.0550	-.0232	-.0413	-.0582	-.0587	-.0649	-.0666	-.0689	-.0638	-.0841
247.500		.3536	.1575	.0409	.0165	-.0007	-.0030	-.0103	-.0143	-.0125	.0341	-.0717
270.000	.8635	.5322	.2871	.1214	9.9990	.0814	.0781	.0690	.0685	.0702	.1231	-.0734
292.500		.6764	.3964	.1936	.1817	.1490	.1490	.1434	.1479	.1344	.2212	-.0599
315.000	1.1452	.7525	.4572	.2302	.2414	.1998	.1761	.1693	.1603	.1575	.4741	-.0497
328.000									.2820	.2020	.3774	-.0407
346.000		.6651	.3817	.1992	.1767	.1045	.1006	.0961	.2375	.2719	.4180	-.0379
360.000	.9300	.6407	.3431	.1531	.1221	.0466	.0956	.1108	.1632	.2833	.3327	.0054

MACH (2) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(PSI) = 3.0700 PO = 90.014 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8389	.5986	.3364	.1650	.1448	.1045	.1158	.1247	.2154	.2558	.3576	.0616
14.000		.4951	.2582	.1221	.1019	.1044	.0994	.1007	.1410	.2758	.3085	.0288
24.000									.1460	.2379	.4005	-.0076
45.000	.4761	.2338	.1120	.0616	.0591	.0440	.0364	.0377	.0515	.0528	.0553	.0036
67.50		.1233	.0616	.0377	.0377	.0326	.0377	.0288	.0326	.0263	-.0051	-.0127
90.000	.1762	.0679	.0414	.0339	9.9990	.0263	.0339	.0288	.0263	.0238	-.0127	-.0139
112.500		.0477	.0250	.0250	.0250	.0200	.0250	.0238	.0225	.0187	.0124	.0112
135.000	.1233	.0464	.0225	.0225	.0212	.0175	.0238	.0225	9.9990	.0124	.0061	-.0013
157.500		.0452	.0276	.0213	.0213	.0137	.0187	.0175	.0490	.0112	-.0013	-.0039
180.000	.1863	.0553	.0238	.0162	.0124	.0112	.0112	.0112	.0137	-.0001	-.0026	-.0039
202.500		.1094	.0376	.0175	.0149	.0124	.0086	.0086	.0086	.0061	-.0064	-.0051

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A028)

MACH (2) = 4.960 ALPHA (1) = 20.490

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0350	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4370	.2064	.0830	.0338	.0225	.0187	.0137	.0124	.0124	.0049	.0023	-.0089
247.500		.3539	.1724	.0729	.0490	.0364	.0376	.0364	.0351	.0326	.0742	.0149
270.000	.8628	.5252	.2858	.1372	9.9990	.0893	.0994	.0981	.1019	.0981	.1510	.0086
292.500		.6587	.3841	.1989	.1737	.1573	.1611	.1649	.1699	.1636	.2606	.0137
315.000	1.1110	.7306	.4408	.2291	.2064	.1951	.2039	.1976	.2014	.1838	.3992	.0112
326.000									.2921	.2846	.3501	.0187
346.000		.6310	.3765	.2027	.1775	.1498	.1183	.1157	.2279	.2241	.4294	.0011
360.000	.8389	.5986	.3384	.1650	.1448	.1045	.1158	.1247	.2154	.2558	.3576	.0616

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A029) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1088.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.8650 PO = 60.038 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.9722	.7314	.4169	.2016	.1728	.0714	.1503	.1785	.2788	.3532	.4077	.0707
14.000		.5464	.2935	.1244	.1012	.1407	.1136	.1390	.1599	.3087	.4206	-.0092
24.000									.2003	.3918	.6099	-.0802
45.000	.4775	.2229	.0899	-.0019	.0020	-.0531	-.0588	-.0469	.0121	-.0041	.0268	-.0678
67.500		.0831	-.0019	-.0481	-.0526	-.0689	-.0655	-.0633	-.0610	-.0616	-.0813	-.0931
90.000	.1293	.0054	-.0452	-.0650	9.9990	-.0683	-.0655	-.0638	-.0616	-.0549	-.0864	-.0892
112.500		-.0182	-.0559	-.0678	-.0695	-.0655	-.0712	-.0661	-.0678	-.0621	-.0526	-.0633
135.000	.0854	-.0103	-.0520	-.0678	-.0497	-.0655	-.0571	-.0621	9.9990	-.0650	-.0561	-.0802
157.500		-.0148	-.0554	-.0700	-.0706	-.0723	-.0700	-.0638	-.0486	-.0632	-.0678	-.0819
180.000	.1214	-.0030	-.0543	-.0734	-.0740	-.0683	-.0683	-.0616	-.0610	-.0539	-.0638	-.0836
202.500		.0634	-.0233	-.0621	-.0728	-.0695	-.0678	-.0633	-.0633	-.0627	-.0644	-.0807
225.000	.3998	.1845	.0527	-.0199	-.0396	-.0548	-.0554	-.0576	-.0605	-.0605	-.0559	-.0807
247.500		.3722	.1795	.0583	.0335	.0166	.0155	.0116	.0082	.0099	.0657	-.0678
270.000	.9204	.5970	.3423	.1648	9.9990	.1226	.1231	.1186	.1192	.1203	.1862	-.0667
292.500		.7795	.4882	.2623	.2533	.2206	.2217	.2217	.2212	.2121	.3175	-.0452
315.000	1.2714	.8783	.5668	.3094	.3303	.2835	.2610	.2599	.2334	.2424	.6420	-.0300
326.000									.3924	.2786	.5175	-.0233
346.000		.7344	.4460	.2589	.2381	.1440	.1451	.1412	.3254	.3344	.4865	-.0171
360.000	.9722	.7314	.4169	.2016	.1728	.0714	.1503	.1785	.2788	.3532	.4077	.0707

MACH (2) = 4.960 ALPHA (1) = 24.510 BETA = .00000 Q(PSI) = 3.0700 PO = 90.016 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.9032	.7310	.4171	.2116	.1953	.1347	.1574	.1801	.3037	.3402	.4572	.0868
14.000		.5507	.2961	.1473	.1209	.1436	.1347	.1410	.2116	.3793	.4005	.0515
24.000									.2329	.3891	.5214	.0049
45.000	.4786	.2343	.1221	.0692	.0654	.0478	.0440	.0440	.0692	.0755	.0716	.0162
67.500		.1132	.0603	.0452	.0389	.0389	.0414	.0338	.0351	.0338	-.0051	-.0114
90.000	.1409	.0603	.0427	.0351	9.9990	.0288	.0364	.0326	.0275	.0275	-.0127	-.0101
112.500		.0427	.0301	.0288	.0301	.0225	.0301	.0288	.0288	.0250	.0149	.0162
135.000	.0893	.0439	.0301	.0263	.0238	.0200	.0238	.0238	9.9990	.0162	.0049	.0011
157.500		.0389	.0301	.0225	.0225	.0162	.0200	.0212	.0515	.0137	-.0039	-.0026
180.000	.1447	.0414	.0212	.0187	.0112	.0137	.0137	.0137	.0137	.0011	-.0026	-.0039
202.500		.0918	.0288	.0187	.0112	.0137	.0074	.0086	.0061	.0061	-.0064	-.0039

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A029)

MACH (2) = 4.860 ALPHA (1) = 24.510

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4206	.2014	.0855	.0364	.0225	.0175	.0187	.0112	.0137	.0088	.0086	-.0039
247.500		.3828	.1951	.0830	.0616	.0553	.0553	.0865	.0540	.0540	.1006	.0212
270.000	.9435	.5995	.3425	.1787	9.9990	.1296	.1422	.1435	.1498	.1472	.2178	.0137
292.500		.7860	.4887	.2694	.2379	.2266	.2417	.2455	.2518	.2417	.3614	.0238
315.000	1.2836	.8918	.5680	.3110	.2883	.2800	.3009	.2909	.2946	.2694	.5920	.0263
326.000									.4231	.3841	.4924	.0376
346.000		.7003	.4307	.2543	.2216	.2001	.1674	.1573	.3072	.3009	.5464	.0112
360.000	.9032	.7310	.4171	.2116	.1953	.1347	.1574	.1801	.3037	.3402	.4572	.0868

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A030) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 135.000

MACH (1) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(PSI) = 6.8650 PO = 60.036 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.9902	.8199	.4919	.2608	.2281	.1091	.2112	.2517	.3741	.4214	.4860	.1045
14.000		.5944	.3369	.1632	.1390	.1993	.1593	.1959	.2641	.4248	.5088	.0009
24.000									.2865	.4981	.6815	-.0774
45.000	.4580	.2157	.0928	.0020	.0077	-.0531	-.0554	-.0520	.0533	.0268	.0081	-.0509
67.500		.0617	-.0148	-.0537	-.0559	-.0723	-.0689	-.0650	-.0638	-.0644	-.0864	-.0926
90.000	.0809	-.0204	-.0571	-.0695	9.9990	-.0717	-.0706	-.0706	-.0695	-.0667	-.0914	-.0920
112.500		-.0374	-.0644	-.0728	-.0717	-.0745	-.0751	-.0723	-.0734	-.0678	-.0593	-.0638
135.000	.0526	-.0255	-.0588	-.0700	-.0633	-.0689	-.0678	-.0734	9.9990	-.0723	-.0711	-.0830
157.500		-.0340	-.0633	-.0745	-.0751	-.0728	-.0717	-.0706	-.0531	-.0678	-.0723	-.0875
180.000	.0739	-.0312	-.0667	-.0779	-.0785	-.0762	-.0689	-.0672	-.0661	-.0689	-.0695	-.0881
202.500		.0375	-.0362	-.0672	-.0762	-.0751	-.0706	-.0678	-.0683	-.0667	-.0699	-.0858
225.000	.3631	.1727	.0499	-.0188	-.0374	-.0492	-.0509	-.0554	-.0559	-.0537	-.0475	-.0875
247.500		.3915	.1959	.0753	.0516	.0392	.0359	.0319	.0313	.0364	.1040	-.0616
270.000	.9760	.6643	.3977	.2089	9.9990	.1694	.1740	.1683	.1751	.1751	.2664	-.0587
292.500		.8871	.5980	.3417	.3400	.3096	.3147	.3074	.2995	.2978	.4274	-.0289
315.000	1.3959	1.0117	.6877	.4020	.4375	.3908	.3660	.3598	.3153	.3896	.8142	-.0132
326.000									.5102	.3611	.6843	-.0030
346.000		.7942	.5079	.3215	.3107	.1964	.1738	.1913	.4048	.4020	.5598	.0082
360.000	.9902	.8199	.4919	.2608	.2281	.1091	.2112	.2517	.3741	.4214	.4860	.1045

MACH (2) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(PSI) = 3.0700 PO = 90.021 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.8100	.7350	.8800	.8920	.9230	.8540
THETA												
.000	.8830	.8001	.4825	.2569	.2305	.1801	.1889	.2405	.3691	.4107	.5643	.1145
14.000		.5995	.3400	.1762	.1611	.1787	.1724	.1888	.2959	.4559	.4861	.0716
24.000									.3261	.5101	.6499	.0137
45.000	.4395	.2279	.1233	.0716	.0691	.0540	.0439	.0464	.0994	.1044	.0893	.0275
67.500		.0968	.0590	.0439	.0389	.0351	.0414	.0326	.0364	.0338	-.0051	-.0064
90.000	.1006	.0490	.0326	.0301	9.9990	.0275	.0338	.0263	.0225	.0250	-.0164	-.0089
112.500		.0364	.0263	.0263	.0275	.0263	.0288	.0275	.0212	.0250	.0124	.0212
135.000	.0616	.0377	.0288	.0238	.0238	.0175	.0238	.0225	9.9990	.0175	.0011	-.0013
157.500		.0288	.0212	.0175	.0162	.0137	.0187	.0149	.0590	.0137	-.0039	-.0051
180.000	.1120	.0301	.0200	.0162	.0099	.0099	.0124	.0112	.0149	.0038	-.0026	-.0051
202.500		.0767	.0301	.0162	.0112	.0086	.0099	.0074	.0086	.0074	-.0051	-.0064

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A030)

MACH (2) = 4.980 ALPHA (1) = 7.750

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.3992	.1901	.0792	.0326	.0212	.0225	.0200	.0175	.0137	.0137	.0086	-.0089
247.500		.3992	.2077	.0994	.0742	.0653	.0754	.0704	.0691	.0792	.1334	.0275
270.000	.9939	.6587	.3967	.2153	9.9990	.1838	.1976	.1951	.2027	.2052	.2883	.0162
292.500		.8855	.5768	.3350	.3098	.3198	.3274	.3362	.3375	.3211	.4698	.0376
315.000	1.4021	.9989	.6688	.3929	.3778	.4055	.4068	.3979	.3841	.3488	.7948	.0351
326.000									.5590	.4761	.6613	.0515
346.000		.7545	.4937	.3110	.2846	.2568	.1951	.1989	.3965	.3728	.6299	.0200
360.000	.8830	.8001	.4825	.2569	.2305	.1801	.1899	.2405	.3691	.4107	.5643	.1145

MSFC 696 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A031) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = -8.380 BETA = .00000 Q(PSI) = 10.247 PO = 28.005 P = 3.8150

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3622	.1262	-.0438	-.1593	-.0955	-.0465	-.0295	-.0148	-.0035	.1137	.4034	-.1761
14.000		.1265	-.0494	-.1583	-.0965	-.1519	-.0336	-.0230	-.0091	.1016	.3060	-.1941
24.000									-.0119	.1313	.2565	-.2099
45.000	.4459	.1409	-.0363	-.1547	-.1136	-.0200	-.0645	-.0381	-.0397	.0715	.1757	-.2093
67.500		.1981	-.0027	-.1324	-.1124	-.0619	-.0623	-.0653	-.0547	-.0144	.0942	-.1986
90.000	.5502	.2572	.0410	-.1065	9.9990	-.0892	-.0661	-.0673	-.0831	-.0752	-.0232	-.1970
112.500		.3189	.0842	-.0750	-.0535	-.0765	-.0791	-.0596	-.0641	-.0637	-.0418	-.1946
135.000	.7232	.3939	.1319	-.0488	-.0231	-.0348	-.0390	-.0477	9.9990	-.0345	-.0353	-.1881
157.500		.4219	.1528	-.0234	.0014	-.0219	-.0095	-.0249	-.0110	-.0193	-.0164	-.1956
180.000	.7795	.4141	.1563	-.0106	-.0027	.0104	.0085	-.0072	-.0087	-.0031	-.0035	-.2002
202.500		.4100	.1481	-.0156	-.0156	-.0008	-.0231	-.0276	-.0208	-.0103	-.0148	-.1994
225.000	.7029	.3745	.1300	-.0291	-.0273	-.0276	-.0386	-.0510	-.0446	-.0299	-.0436	-.1902
247.500		.3070	.0832	-.0725	-.0540	-.0639	-.0672	-.0657	-.0676	-.0593	-.0433	-.1973
270.000	.5604	.2542	.0395	-.1003	9.9990	-.0757	-.0754	-.0580	-.0765	-.0686	-.0236	-.2017
292.500		.1945	-.0050	-.1261	-.1099	-.0616	-.0571	-.0563	-.0574	-.0348	.0916	-.1889
315.000	.4541	.1620	-.0266	-.1464	-.1064	-.0368	-.0652	-.0413	-.0402	.0361	.1572	-.1862
326.000									-.0360	.0485	.1783	-.1914
346.000		.1615	-.0323	-.1521	-.1011	-.1332	-.0266	-.0198	.0349	.1154	.2408	-.1887
360.000	.3622	.1262	-.0438	-.1593	-.0955	-.0465	-.0295	-.0148	-.0035	.1137	.4034	-.1761

MACH (2) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8650 PO = 60.039 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3034	.1165	.0003	-.0469	-.0339	-.0317	-.0306	-.0187	-.0148	.0139	.1936	-.0700
14.000		.1181	.0037	-.0458	-.0340	-.0379	-.0340	-.0238	-.0188	.0071	.1378	-.0796
24.000									-.0131	.0195	.0792	-.0819
45.000	.3772	.1428	.0161	-.0452	-.0340	-.0295	-.0312	-.0323	-.0272	-.0204	.0211	-.0819
67.500		.1857	.0459	-.0323	-.0368	-.0300	-.0312	-.0328	-.0266	-.0261	-.0198	-.0745
90.000	.5198	.2402	.0769	-.0143	9.9990	-.0318	-.0340	-.0385	-.0312	-.0250	-.0199	-.0661
112.500		.3062	.1175	.0099	.0003	-.0114	-.0188	-.0221	-.0266	-.0266	-.0084	-.0565
135.000	.7040	.3720	.1585	.0312	.0188	.0098	.0070	.0019	9.9990	-.0025	-.0002	-.0548
157.500		.4110	.1879	.0504	.0358	.0262	.0240	.0223	.0488	.0178	.0189	-.0576
180.000	.7705	.4099	.1981	.0578	.0431	.0335	.0318	.0302	.0279	.0257	.0251	-.0576
202.500		.4127	.1857	.0488	.0341	.0290	.0240	.0211	.0189	.0189	.0189	-.0582

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A031)

MACH (2) = 3.480 ALPHA (1) = -8.360

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6809	.3648	.1620	.0341	.0211	.0121	.0099	.0042	-.0002	-.0013	-.0013	-.0559
247.500		.3079	.1243	.0127	.0054	-.0081	-.0148	-.0182	-.0210	-.0244	-.0114	-.0565
270.000	.5271	.2469	.0842	-.0098	9.9990	-.0301	-.0334	-.0346	-.0301	-.0256	-.0188	-.0633
292.500		.1919	.0482	-.0300	-.0250	-.0221	-.0306	-.0323	-.0278	-.0266	-.0216	-.0740
315.000	.3862	.1468	.0223	-.0435	-.0328	-.0233	-.0244	-.0295	-.0278	-.0221	.0228	-.0768
326.000									-.0188	-.0109	.0629	-.0779
346.000		.1357	.0156	-.0463	-.0333	-.0446	-.0271	-.0192	-.0085	.0416	.1079	-.0796
360.000	.3034	.1165	.0003	-.0469	-.0339	-.0317	-.0306	-.0187	-.0148	.0139	.1936	-.0700

MACH (3) = 4.960 ALPHA (1) = -8.290 BETA = .00000 Q(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2833	.1322	.0755	.0603	.0578	.0641	.0528	.0603	.0528	.0566	.0326	.0074
14.000		.1334	.0578	.0540	.0427	.0364	.0427	.0427	.0351	.0427	.0578	.0061
24.000									.0112	.0124	.0137	.0049
45.000	.3627	.1548	.0729	.0490	.0464	.0364	.0401	.0401	.0351	.0376	.0061	.0049
67.500		.1888	.0742	.0389	.0351	.0338	.0401	.0338	.0326	.0326	-.0001	.0023
90.000	.4975	.2367	.0994	.0464	9.9990	.0263	.0364	.0326	.0275	.0301	.0036	.0074
112.500		.2972	.1296	.0515	.0439	.0288	.0364	.0351	.0263	.0275	.0149	.0137
135.000	.6676	.3526	.1611	.0628	.0502	.0301	.0401	.0389	9.9990	.0301	.0200	.0149
157.500		.3904	.1863	.0729	.0565	.0414	.0464	.0439	.0641	.0364	.0288	.0137
180.000	.7293	.3904	.1913	.0754	.0565	.0439	.0464	.0439	.0401	.0364	.0351	.0149
202.500		.3929	.1863	.0704	.0515	.0351	.0414	.0389	.0338	.0326	.0313	.0124
225.000	.6524	.3539	.1611	.0590	.0439	.0313	.0313	.0301	.0238	.0225	.0200	.0124
247.500		.3022	.1321	.0452	.0326	.0225	.0212	.0212	.0124	.0124	.0112	.0061
270.000	.5113	.2455	.1006	.0301	9.9990	.0049	.0112	.0137	.0086	.0074	.0124	.0074
292.500		.1938	.0716	.0162	.0238	.0112	.0112	.0137	.0099	.0061	.0112	.0112
3.5.000	.3652	.1535	.0515	.0124	.0175	.0023	.0112	.0149	.0061	.0074	.0099	.0099
326.000									.0112	.0124	.0086	.0023
346.000		.1409	.0477	.0112	.0149	-.0001	.0099	.0124	.0074	.0124	.0350	.0049
360.000	.2833	.1322	.0755	.0603	.0578	.0641	.0528	.0603	.0528	.0566	.0326	.0074

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A032) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.680 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 10.281 PO = 28.005 P = 3.8300

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4252	.2127	-.0045	-.1303	-.0893	-.0705	-.0350	-.0087	.0000	.1701	.3617	-.1756
14.000		.2118	.0003	-.1291	-.0858	-.1738	-.0331	-.0162	.0059	.1749	.2839	-.2181
24.000									.0031	.1354	.2668	-.2189
45.000	.5132	.2132	.0112	-.1245	-.0862	-.0113	-.0587	-.0169	-.0124	.0740	.1801	-.2228
67.500		.2380	.0360	-.1148	-.0758	-.0146	-.0495	-.0386	-.0213	-.0101	.1267	-.1934
90.000	.5714	.2648	.0534	-.0943	9.9990	-.0415	-.0076	-.0366	-.0340	-.0208	.0258	-.1955
112.500		.2822	.0669	-.0863	-.0554	-.0505	-.0419	-.0234	-.0392	-.0362	.0050	-.2074
135.000	.6455	.3337	.0831	-.0709	-.0434	-.0343	-.0298	-.0260	9.9990	-.0268	-.0277	-.1720
157.500		.3333	.0869	-.0554	-.0385	-.0340	-.0215	-.0245	-.0147	-.0200	-.0198	-.1651
180.000	.6697	.3100	.0910	-.0607	-.0464	-.0177	-.0162	-.0219	-.0193	-.0113	-.0225	-.1707
202.500		.3175	.0918	-.0571	-.0509	-.0249	-.0351	-.0324	-.0215	-.0049	-.0190	-.1689
225.000	.6338	.3158	.0816	-.0633	-.0471	-.0316	-.0219	-.0350	-.0328	-.0132	-.0281	-.1652
247.500		.2842	.0662	-.0787	-.0539	-.0283	-.0279	-.0117	-.0369	-.0290	.0028	-.1927
270.000	.5714	.2606	.0541	-.0989	9.9990	-.0263	-.0222	-.0237	-.0320	-.0263	.0149	-.1962
292.500		.2365	.0296	-.1093	-.0780	-.0208	-.0317	-.0275	-.0302	-.0291	.1200	-.1818
315.000	.5073	.2232	.0187	-.1248	-.0800	-.0154	-.0631	-.0267	-.0342	.0552	.1850	-.1960
326.000									-.0123	.0512	.1890	-.1942
346.000		.2494	.0153	-.1183	-.0934	-.1485	-.0250	-.0194	.0349	.1327	.2593	-.1898
360.000	.4252	.2127	-.0045	-.1303	-.0893	-.0705	-.0350	-.0087	.0000	.1701	.3617	-.1756

MACH (2) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 6.8650 PO = 60.036 P = .81000

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3953	.1785	.0364	-.0334	-.0170	-.0244	-.0255	.0105	-.0074	.0381	.1507	-.0672
14.000		.1783	.0369	-.0328	-.0165	-.0283	-.0289	-.0199	-.0103	.0397	.1614	-.0751
24.000									-.0013	.0482	.1130	-.0830
45.000	.4601	.1896	.0493	-.0295	-.0159	-.0171	-.0159	-.0182	-.0233	.0059	.0916	-.0802
67.500		.2196	.0657	-.0232	-.0221	-.0136	-.0176	-.0153	-.0136	-.0086	.0093	-.0762
90.000	.5356	.2476	.0814	-.0143	9.9990	-.0165	-.0131	-.0148	-.0165	-.0075	-.0035	-.0689
112.500		.2792	.1028	-.0024	-.0069	-.0143	-.0109	-.0114	-.0154	-.0114	.0065	-.0610
135.000	.6240	.3113	.1192	.0054	-.0019	-.0089	-.0041	-.0075	9.9990	-.0086	-.0047	-.0588
157.500		.3237	.1333	.0138	.0054	-.0013	.0026	.0003	.0037	-.0024	-.0002	-.0559
180.000	.6499	.3153	.1350	.0161	.0082	.0014	.0048	.0026	-.0007	-.0002	.0009	-.0571
202.500		.3243	.1293	.0116	.0042	.0014	.0020	-.0007	-.0041	-.0024	-.0019	-.0559

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A032)

MACH (2) = 3.480 ALPHA (1) = -4.330

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6043	.3013	.1210	.0071	.0009	-.0058	-.0029	-.0063	-.0086	-.0074	-.0064	-.0571
247.500		.2758	.1023	-.0030	-.0064	-.0148	-.0109	-.0109	-.0143	-.0120	.0003	-.0650
270.000	.5356	.2482	.0842	-.0131	9.9990	-.0204	-.0131	-.0126	-.0154	-.0097	-.0007	-.0667
292.500		.2172	.0645	-.0238	-.0081	-.0075	-.0114	-.0126	-.0154	-.0126	.0065	-.0734
315.000	.4691	.1907	.0482	-.0323	-.0165	-.0092	-.0126	-.0182	-.0199	-.0081	.0809	-.0745
326.000									-.0024	-.0007	.0809	-.0695
346.000		.1982	.0516	-.0289	-.0176	-.0480	-.0266	-.0204	.0037	.0454	.1006	-.0751
360.000	.3953	.1785	.0364	-.0334	-.0170	-.0244	-.0255	.0105	-.0074	.0381	.1507	-.0672

MACH (3) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0700 PO = 90.016 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3791	.1801	.0906	.0642	.0642	.0642	.0553	.1612	.0553	.0604	.0590	.0137
14.000		.1788	.0755	.0553	.0452	.0452	.0440	.0465	.0402	.0528	.0817	.0099
24.000									.0175	.0263	.0515	.0023
45.000	.4498	.1951	.0868	.0502	.0477	.0414	.0427	.0376	.0364	.0401	.0389	.0024
67.500		.2140	.0880	.0389	.0364	.0389	.0439	.0313	.0338	.0338	.0149	.0112
90.000	.5176	.2417	.1031	.0439	9.9990	.0351	.0401	.0326	.0313	.0338	.0099	.0099
112.500		.2682	.1107	.0439	.0389	.0301	.0376	.0326	.0275	.0301	.0263	.0225
135.000	.5934	.2934	.1233	.0452	.0326	.0250	.0338	.0288	9.9990	.0225	.0238	.0238
157.500		.3047	.1321	.0464	.0351	.0301	.0326	.0288	.0565	.0250	.0187	.0212
180.000	.6224	.3009	.1372	.0490	.0351	.0301	.0313	.0275	.0288	.0212	.0200	.0238
202.500		.3072	.1359	.0439	.0351	.0212	.0301	.0238	.0225	.0225	.0200	.0238
225.000	.5831	.2846	.1233	.0376	.0275	.0238	.0250	.0200	.0175	.0149	.0200	.0225
247.500		.2682	.1120	.0326	.0238	.0175	.0200	.0175	.0124	.0124	.0212	.0187
270.000	.5252	.2417	.0931	.0238	9.9990	.0124	.0162	.0149	.0086	.0112	.0187	.0124
292.500		.2140	.0842	.0175	.0250	.0200	.0162	.0124	.0162	.0137	.0149	.0124
315.000	.4660	.1888	.0691	.0149	.0200	.0074	.0175	.0112	.0049	.0137	.0377	.0024
326.000									.0112	.0187	.0351	.0049
346.000		.1964	.0692	.0137	.0150	.0011	.0074	.0061	.0074	.0162	.0452	.0024
360.000	.3791	.1801	.0906	.0642	.0642	.0642	.0553	.1612	.0553	.0604	.0590	.0137

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A033) (16 NOV 74)

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T1

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 10.241 PO = 28.003 P = 3.8090

DEPENDENT VARIABLE CP

SECTION (1)ANK

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5131	.2655	.0682	-.1003	-.0614	-.0531	-.0372	-.0024	-.0047	.1877	.3908	-.1873
14.000		.2627	.0673	-.0981	-.0449	-.1584	-.0344	-.0197	.0119	.1805	.2763	-.2229
24.000									.0273	.1724	.2543	-.2276
45.000	.5810	.2434	.0470	-.0966	-.0710	-.0185	-.0566	-.0106	-.0664	.0432	.2714	-.2385
67.500		.2612	.0500	-.0923	-.0685	.0054	-.0496	-.0168	-.0292	-.0330	.1533	-.1914
90.000	.5748	.2594	.0459	-.0993	9.9990	-.0337	-.0053	-.0344	-.0223	-.0148	.0345	-.1876
112.500		.2688	.0447	-.1032	-.0609	-.0413	-.0186	-.0262	-.0277	-.0250	.0353	-.1900
135.000	.5896	.2726	.0387	-.1033	-.0655	-.0440	-.031'	-.0258	9.9990	-.0281	-.0250	-.1550
157.500		.2485	.0285	-.1046	-.0722	-.0454	-.0246	-.0193	-.0144	-.0273	-.0240	-.1383
180.000	.5778	.2254	.0289	-.1041	-.0795	-.0289	-.0175	-.0172	-.0164	-.0206	-.0281	-.1422
202.500		.2342	.0330	-.1075	-.0773	-.0293	-.0346	-.0228	-.0228	-.0206	-.0255	-.1423
225.000	.5657	.2456	.0345	-.1004	-.0750	-.0266	-.0172	-.0149	-.0293	-.0206	-.0251	-.1495
247.500		.2473	.0345	-.0914	-.0639	-.0314	-.0171	-.0050	-.0257	-.0223	.0243	-.1798
270.000	.5833	.2507	.0440	-.0940	9.9990	-.0295	-.0118	-.0156	-.0178	-.0201	.0334	-.1882
292.500		.2424	.0474	-.0963	-.0556	.0055	-.0446	-.0140	-.0280	-.0310	.1446	-.2022
315.000	.5871	.2571	.0591	-.0980	-.0610	-.0213	-.0689	-.0224	-.0443	.0039	.2148	-.2174
326.000									.0281	.0077	.2130	-.2073
348.000		.3056	.0822	-.0856	-.0686	-.1400	-.0368	-.0244	.0417	.1381	.2802	-.2027
360.000	.5131	.2655	.0682	-.1003	-.0614	-.0531	-.0372	-.0024	-.0047	.1877	.3908	-.1873

MACH (2) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8650 PO = 60.038 P = .81000

DEPENDENT VARIABLE CP

SECTION (1)ANK

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5091	.2529	.0804	-.0114	.0082	-.0058	-.0170	.0201	-.0029	.0505	.1586	-.0610
14.000		.2516	.0820	-.0097	.0093	-.0137	-.0199	-.0126	-.0058	.0516	.1738	-.0712
24.000									.0054	.0521	.1405	-.0774
45.000	.5457	.2465	.0814	-.0114	.0020	.0003	-.0114	-.0126	-.0126	-.0002	.1634	-.0740
67.500		.2561	.0899	-.0092	-.0069	-.0058	-.0064	-.0086	-.0035	-.0103	.0397	-.0706
90.000	.5443	.2557	.0905	-.0086	9.9990	-.0080	-.0029	-.0058	-.0080	-.0052	.0065	-.0712
112.500		.2550	.0882	-.0092	-.0114	-.0086	-.0047	-.0041	-.0075	-.0064	.0195	-.0610
135.000	.5474	.2555	.0865	-.0114	-.0148	-.0126	-.0058	-.0047	9.9990	-.0084	-.0058	-.0576
157.500		.2488	.0871	-.0109	-.0143	-.0109	-.0069	-.0047	.0031	-.0058	-.0075	-.0532
180.000	.5361	.2376	.0843	-.0120	-.0142	-.0120	-.0069	-.0052	-.0058	-.0058	-.0086	-.0531
202.500		.2489	.0843	-.0131	-.0142	-.0131	-.0069	-.0052	-.0058	-.0024	-.0081	-.0554

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A033)

MACH (2) = 3.480 ALPHA (1) = -.280

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5285	.2443	.0826	-.0131	-.0165	-.0109	-.0075	-.0058	-.0069	-.0058	-.0052	-.0593
247.500		.2469	.0808	-.0132	-.0154	-.0120	-.0070	-.0042	-.0070	-.0064	.0133	-.0655
270.000	.5333	.2486	.0853	-.0120	9.9990	-.0132	-.0030	-.0019	-.0087	-.0064	.0076	-.0717
292.500		.2405	.0815	-.0125	.0065	-.0001	.0026	-.0069	-.0046	-.0103	.0312	-.0712
315.000	.5536	.2454	.0842	-.0126	-.0019	.0037	-.0103	-.0120	-.0103	-.0143	.0730	-.0723
326.000									.0245	.0149	.0538	-.0779
346.000		.2758	.0989	-.0024	.0110	-.0447	-.0148	-.0131	.0099	.0747	.1119	-.0757
360.000	.5091	.2529	.0804	-.0114	.0082	-.0058	-.0170	.0201	-.0029	.0505	.1586	-.0610

MACH (3) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4698	.2432	.1095	.0755	.0780	.0755	.0604	.0730	.0591	.0679	.0553	-.0013
14.000		.2393	.1019	.0704	.0666	.0591	.0477	.0503	.0503	.0616	.1006	-.0076
24.000									.0288	.0364	.0805	-.0114
45.000	.5151	.2379	.1006	.0628	.0603	.0515	.0464	.0464	.0376	.0464	.0439	-.0076
67.500		.2442	.1019	.0515	.0502	.0427	.0477	.0414	.0376	.0364	.0438	-.0039
90.000	.5113	.2392	.0981	.0502	9.9990	.0376	.0427	.0401	.0313	.0313	.0086	-.0026
112.500		.2367	.0943	.0439	.0414	.0326	.0376	.0376	.0288	.0301	.0238	.0112
135.000	.5050	.2367	.0943	.0427	.0351	.0288	.0313	.0338	9.9990	.0238	.0137	.0124
157.500		.2329	.0918	.0389	.0351	.0250	.0313	.0313	.0616	.0200	.0124	.0124
180.000	.4924	.2229	.0855	.0364	.0288	.0263	.0250	.0263	.0238	.0162	.0162	.0162
202.500		.2304	.0830	.0338	.0238	.0225	.0288	.0225	.0162	.0175	.0137	.0175
225.000	.4887	.2316	.0855	.0313	.0238	.0212	.0200	.0212	.0162	.0124	.0124	.0124
247.500		.2329	.0830	.0301	.0212	.0200	.0187	.0212	.0099	.0124	.0225	.0086
270.000	.4950	.2367	.0893	.0288	9.9990	.0162	.0200	.0212	.0112	.0086	.0175	.0049
292.500		.2405	.0905	.0275	.0414	.0238	.0212	.0212	.0099	.0112	.0250	.0011
315.000	.5290	.2367	.0842	.0263	.0288	.0137	.0187	.0175	.0049	.0061	.0389	-.0026
326.000									.0238	.0288	.0414	-.0026
346.000		.2644	.1057	.0338	.0351	.0099	.0137	.0149	.0149	.0225	.0385	-.0039
360.000	.4698	.2432	.1095	.0755	.0780	.0755	.0604	.0730	.0591	.0679	.0553	-.0013

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A034) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 10.214 PO = 28.002 P = 3.7810

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6002	.3632	.1282	-.0470	-.0210	-.0252	-.0225	-.0116	.0011	.1733	.5368	-.2115
14.000		.3564	.1205	-.0442	-.0052	-.1351	-.0270	-.0138	.0139	.1851	.3232	-.2334
24.000									.0266	.1688	.2494	-.2361
45.000	.6380	.3187	.0884	-.0614	-.0132	-.0358	-.0418	-.0230	-.0614	.0455	.1838	-.2449
67.500		.2979	.0707	-.0837	-.0502	-.0091	-.0792	-.0324	-.0569	-.0396	.1348	-.2130
90.000	.5635	.2604	.0443	-.1022	9.9990	-.0336	-.0397	-.0449	-.0283	-.0366	.0349	-.2021
112.500		.2306	.0183	-.1173	-.0906	-.0642	-.0378	-.0423	-.0329	-.0295	.0292	-.1652
135.000	.5033	.2054	-.0046	-.1212	-.0906	-.0631	-.0325	-.0389	9.9990	-.0303	-.0258	-.1471
157.500		.1693	-.0076	-.1311	-.0929	-.0446	-.0208	-.0148	-.0095	-.0205	-.0197	-.1376
180.000	.4680	.1524	-.0165	-.1294	-.0934	-.0264	-.0089	-.0059	-.0108	-.0142	-.0254	-.1336
202.500		.1618	-.0190	-.1383	-.1071	-.0269	-.0292	-.0224	-.0201	-.0144	-.0227	-.1386
225.000	.4825	.1780	-.0056	-.1290	-.1001	-.0428	-.0623	-.0432	-.0307	-.0234	-.0310	-.1471
247.500		.1979	.0076	-.1192	-.0938	-.0596	-.0261	-.0368	-.0250	-.0242	.0171	-.1595
270.000	.5673	.2359	.0298	-.1063	9.9990	-.0508	-.0497	-.0383	-.0261	-.0288	.0220	-.1931
292.500		.2720	.0490	-.0881	-.0455	-.0151	-.0698	-.0349	-.0619	-.0417	.1372	-.2103
315.000	.6542	.3101	.0760	-.0714	-.0402	-.0402	-.0668	-.0383	-.0931	-.0220	.2602	-.2248
326.000									.0456	-.0060	.1826	-.2396
346.000		.3835	.1268	-.0447	-.0402	-.1374	-.0307	-.0185	.0425	.1435	.3039	-.2271
360.000	.6002	.3632	.1282	-.0470	-.0210	-.0252	-.0225	-.0116	.0011	.1733	.5368	-.2115

MACH (2) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 6.8640 PO = 60.029 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.9600	.8920	.9230	.9540
THETA												
.000	.6235	.3374	.1351	.0144	.0364	-.0012	-.0058	-.0018	.0032	.0663	.1902	-.0655
14.000		.3338	.1344	.0172	.0392	-.0081	-.0103	-.0035	-.0007	.0690	.1868	-.0621
24.000									.0099	.0882	.1575	-.0836
45.000	.6235	.3036	.1170	.0071	.0201	.0111	-.0125	-.0125	-.0204	.0105	.0849	-.0835
67.500		.2854	.1062	.0003	.0009	.0014	-.0131	-.0165	-.0154	-.0148	.0375	-.0813
90.000	.5418	.2517	.0866	-.0097	9.9990	-.0198	-.0108	-.0215	-.0238	-.0198	-.0013	-.0762
112.500		.2223	.0652	-.0199	-.0244	-.0261	-.0193	-.0199	-.0238	-.0221	.0020	-.0627
135.000	.4637	.2010	.0533	-.0283	-.0294	-.0249	-.0182	-.0182	9.9990	-.0193	-.0154	-.0616
157.500		.1806	.0392	-.0334	-.0334	-.0227	-.0171	-.0154	-.0002	-.0103	-.0069	-.0610
180.000	.4203	.1655	.0342	-.0362	-.0334	-.0238	-.0159	-.0131	-.0058	-.0012	-.0018	-.0655
202.500		.1810	.0382	-.0356	-.0316	-.0220	-.0158	-.0141	-.0085	-.0051	-.0052	-.0633

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A034)

MACH (2) = 3.480 ALPHA (1) = 3.770

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4415	.1879	.0471	-.0312	-.0300	-.0250	-.0176	-.0204	-.0171	-.0143	-.0137	-.0638
247.500		.2082	.0561	-.0261	-.0299	-.0266	-.0199	-.0204	-.0244	-.0227	-.0019	-.0689
270.000	.5203	.2403	.0741	-.0171	9.9990	-.0227	-.0154	-.0227	-.0250	-.0227	-.0064	-.0734
292.500		.2662	.0944	-.0064	.0059	-.0035	-.0081	-.0193	-.0193	-.0255	.0195	-.0796
315.000	.6392	.3012	.1169	.0048	.0031	.0138	-.0126	-.0109	-.0334	-.0126	.0776	-.0723
326.000									.0386	.0032	.0814	-.0757
346.000		.3600	.1514	.0263	.0285	-.0418	.0003	-.0041	.0139	.0843	.1372	-.0790
360.000	.6235	.3374	.1351	.0144	.0364	-.0012	-.0058	-.0018	.0032	.0663	.1902	-.0655

MACH (3) = 4.960 ALPHA (1) = 3.730 BETA = .00000 Q(PSI) = 3.0700 PO = 90.021 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6235	.3186	.1422	.0792	.0817	.0779	.0603	.0590	.0616	.0716	.0855	-.0013
14.000		.3148	.1384	.0729	.0716	.0590	.0515	.0464	.0527	.0628	.1107	-.0038
24.000									.0351	.0490	.0956	-.0101
45.000	.6186	.2922	.1259	.0641	.0603	.0515	.0440	.0377	.0351	.0440	.0515	-.0127
67.500		.2694	.1107	.0490	.0452	.0439	.0452	.0338	.0326	.0351	.0250	-.0101
90.000	.5214	.2405	.0994	.0452	9.9990	.0338	.0401	.0313	.0275	.0288	.0036	-.0139
112.500		.2115	.0767	.0351	.0301	.0275	.0301	.0250	.0225	.0212	.0175	-.0013
135.000	.4420	.1876	.0679	.0313	.0225	.0288	.0263	.0238	9.9990	.0187	.0124	-.0038
157.500		.1724	.0691	.0263	.0225	.0225	.0263	.0212	.0641	.0187	.0099	-.0039
180.000	.4005	.1624	.0578	.0225	.0162	.0175	.0225	.0175	.0212	.0112	.0112	-.0051
202.500		.1724	.0590	.0225	.0187	.0225	.0187	.0162	.0162	.0162	.0086	-.0039
225.000	.4194	.1825	.0628	.0212	.0149	.0212	.0175	.0137	.0149	.0099	.0049	-.0089
247.500		.2027	.0729	.0225	.0137	.0149	.0137	.0112	.0074	.0086	.0162	-.0026
270.000	.5039	.2316	.0880	.0250	9.9990	.0112	.0137	.0124	.0061	.0051	.0137	-.0038
292.500		.2581	.0981	.0313	.0313	.0200	.0175	.0112	.0049	.0023	.0200	-.0026
315.000	.6298	.2934	.1183	.0351	.0313	.0288	.0225	.0162	.0036	.0124	.0477	-.0013
326.000									.0288	.0301	.0540	-.0064
346.000		.3450	.1510	.0490	.0490	.0162	.0212	.0149	.0238	.0401	.0917	-.0114
360.000	.6235	.3186	.1422	.0792	.0817	.0779	.0603	.0590	.0616	.0716	.0855	-.0013

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A035) (16 NOV 74)

MSFC 536 (TA-2F) MCR0200 EXTERNAL TANK, TI

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 7.820 BETA = .00000 Q(PSI) = 10.238 PO = 28.004 P = 3.8060

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7277	.4572	.1842	-.0102	.0210	-.0050	.0047	.0372	.0228	.1341	.6585	-.2288
14.000		.4468	.1844	-.0122	.0206	-.1062	-.0080	.0036	.0228	.1655	.3999	-.2121
24.000									.0708	.1551	.3287	-.2509
45.000	.7339	.3739	.1371	-.0395	.0217	-.0380	-.0573	-.0269	-.0978	.0209	.1135	-.2670
67.500		.3164	.0946	-.0749	-.0383	-.0542	-.1074	-.0617	-.0904	-.0689	.0554	-.2426
90.000	.5730	.2468	.0372	-.1104	9.9990	-.0696	-.1138	-.1036	-.0779	-.0866	.0172	-.2039
112.500		.1857	-.0134	-.1328	-.1207	-.1018	-.1029	-.0712	-.0512	-.0527	.0281	-.1706
135.000	.4442	.1346	-.0367	-.1523	-.1232	-.0964	-.0549	-.0481	9.9990	-.0386	-.0315	-.1562
157.500		.0984	-.0511	-.1591	-.1157	-.0462	-.0179	-.0258	-.0228	-.0303	-.0330	-.1515
180.000	.3751	.0946	-.0666	-.1566	-.1128	-.0205	-.0050	-.0069	-.0137	-.0126	-.0243	-.1411
202.500		.1029	-.0614	-.1657	-.1230	-.0311	-.0273	-.0295	-.0311	-.0273	-.0357	-.1466
225.000	.4008	.1283	-.0349	-.1574	-.1252	-.0587	-.0349	-.0428	-.0391	-.0323	-.0392	-.1578
247.500		.1591	-.0092	-.1406	-.1258	-.1058	-.0734	-.0537	-.0416	-.0394	.0077	-.1630
270.000	.5476	.2210	.0228	-.1081	9.9990	-.0858	-.1111	-.0888	-.0624	-.0745	.0406	-.2057
292.500		.2850	.0712	-.0821	-.0462	-.0557	-.1040	-.0776	-.1025	-.0674	.1006	-.2199
315.000	.7311	.3679	.1237	-.0485	-.0202	-.0462	-.0572	- 0443	-.1188	-.0334	.2020	-.2307
326.000									.0515	.0477	.1465	-.2536
346.000		.4964	.1914	.0009	.0130	-.0916	.0062	.0016	.0564	.1391	.3765	-.2473
360.000	.7277	.4572	.1842	-.0102	.0210	-.0050	.0047	.0372	.0228	.1341	.6585	-.2288

MACH (2) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(PSI) = 6.8650 PO = 60.038 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7452	.4341	.2026	.0521	.0437	.0009	.0178	.0206	.0240	.0938	.2572	-.0655
14.000		.4257	.1964	.0544	.0431	-.0064	.0087	.0183	.0200	.1051	.2161	-.0492
24.000									.0335	.1282	.2033	-.0847
45.000	.7097	.3643	.1597	.0330	.0397	.0166	-.0075	-.0035	-.0047	.0054	.0955	-.0864
67.500		.3141	.1288	.0127	.0099	.0009	-.0188	-.0199	-.0244	-.0227	.0313	-.0847
90.000	.5302	.2454	.0865	-.0103	9.9990	-.0306	-.0312	-.0430	-.0452	-.0447	-.0255	-.0824
112.500		.1903	.0477	-.0311	-.0379	-.0458	-.0446	-.0514	-.0469	-.0435	-.0266	-.0672
135.000	.3806	.1507	.0240	-.0441	-.0447	-.0430	-.0390	-.0413	9.9990	-.0441	-.0368	-.0695
157.500		.1237	.0065	-.0520	-.0447	-.0368	-.0317	-.0244	-.0069	-.0216	-.0187	-.0683
180.000	.3231	.1124	.0009	-.0537	-.0430	-.0306	-.0188	-.0002	-.0069	-.0081	-.0081	-.0672
202.500		.1203	.0048	-.0526	-.0430	-.0351	-.0295	-.0204	-.0204	-.0193	-.0216	-.0678

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A035)

MACH (2) = 3.480 ALPHA (1) = 7.800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.3622	.1395	.0138	-.0486	-.0464	-.0402	-.0374	-.0374	-.0396	-.0396	-.0374	-.0700
247.500		.1783	.0380	-.0374	-.0419	-.0464	-.0464	-.0514	-.0458	-.0413	-.0278	-.0734
270.000	.5046	.2319	.0696	-.0193	9.9990	-.0402	-.0362	-.0481	-.0537	-.0537	-.0272	-.0768
292.500		.2871	.1096	.0020	.0076	-.0030	-.0199	-.0300	-.0328	-.0306	.0263	-.0841
315.000	.7350	.3620	.1547	.0262	.0223	.0307	-.0013	-.0013	-.0221	.0054	.1079	-.0740
326.000									.0392	.0420	.1079	-.0734
346.000		.4527	.2150	.0634	.0561	-.0306	.0273	.0172	.0392	.1141	.1896	-.0796
360.000	.7452	.4341	.2026	.0521	.0437	.0009	.0178	.0206	.0240	.0938	.2572	-.0655

MACH (3) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(PSI) = 3.0700 PO = 90.023 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7469	.4133	.1965	.0944	.1095	.0831	.0705	.0692	.0742	.0919	.1624	.0011
14.000		.4131	.1913	.0905	.0981	.0716	.0603	.0553	.0653	.0880	.1447	-.0039
24.000									.0540	.0754	.1510	-.0127
45.000	.7003	.3627	.1636	.0742	.0779	.0540	.0464	.0439	.0427	.0540	.0716	-.0164
67.500		.3060	.1346	.0540	.0540	.0414	.0477	.0338	.0338	.0364	.0237	-.0152
90.000	.5164	.2405	.0968	.0414	9.9990	.0301	.0351	.0263	.0212	.0250	-.0064	-.0152
112.500		.1838	.0691	.0275	.0275	.0162	.0263	.0212	.0162	.0175	.0061	-.0039
135.000	.3539	.1460	.0515	.0238	.0200	.0175	.0212	.0187	9.9990	.0137	-.0001	-.0101
157.500		.1220	.0401	.0187	.0200	.0162	.0200	.0162	.0666	.0124	-.0013	-.0076
180.000	.3009	.1120	.0389	.0162	.0175	.0074	.0187	.0162	.0187	.0124	.0061	-.0101
202.500		.1195	.0300	.0111	.0149	.0111	.0124	.0099	.0086	.0086	-.0001	-.0089
225.000	.3513	.1397	.0414	.0112	.0112	.0112	.0099	.0061	.0074	.0011	-.0013	-.0114
247.500		.1724	.0502	.0124	.0074	.0036	.0036	.0036	-.0039	-.0001	.0099	-.0076
270.000	.4899	.2228	.0754	.0175	9.9990	.0023	.0061	.0036	-.0051	-.0039	.0023	-.0127
292.500		.2833	.1157	.0313	.0376	.0212	.0187	.0112	.0036	.0086	.0338	-.0139
315.000	.7217	.3476	.1535	.0464	.0427	.0313	.0301	.0212	.0074	.0238	.0641	-.0089
326.000									.0414	.0477	.0779	-.0139
346.000		.4345	.2115	.0767	.0855	.0238	.0401	.0326	.0439	.0754	.1372	-.0114
360.000	.7469	.4133	.1965	.0944	.1095	.0831	.0705	.0692	.0742	.0919	.1624	.0011

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (RIA036) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.970 ALPHA (1) = 12.570 BETA = .00000 Q(PSI) = 10.214 PO = 28.008 P = 3.7790

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8483	.5431	.2656	.0717	.0807	.0588	.0527	.0876	.0433	.1970	.6373	-.2287
14.000		.5343	.2540	.0656	.0735	-.0373	.0357	.0410	.0376	.1768	.5523	-.2127
24.000									.0876	.1860	.4581	-.2620
45.000	.8011	.4215	.1746	.0145	.0031	-.0574	-.0339	-.0445	-.1123	.0455	.0724	-.2883
67.500		.3300	.1130	-.0521	-.0536	-.0855	-.1120	-.0889	-.1180	-.0680	-.0464	-.2453
90.000	.5312	.2213	.0330	-.1120	9.9990	-.1362	-.1635	-.1703	-.1559	-.1393	-.0627	-.2156
112.500		.1432	-.0362	-.1528	-.1558	-.1752	-.1801	-.1074	-.0790	-.0710	-.0131	-.2071
135.000	.3484	.0917	-.0702	-.1795	-.1519	-.1235	-.0910	-.0989	9.9990	-.0974	-.0866	-.1922
157.500		.0640	-.0932	-.1822	-.1349	-.0588	-.0603	-.0664	-.0857	-.0914	-.0930	-.1779
180.000	.2814	.0527	-.1018	-.1798	-.1101	-.0105	-.0123	-.0078	-.0283	-.0233	-.0286	-.1728
202.500		.0577	-.0976	-.1886	-.1310	-.0457	-.0529	-.0601	-.0684	-.0692	-.0809	-.1786
225.000	.3266	.0826	-.0835	-.1792	-.1588	-.0933	-.0823	-.0925	-.1172	-.1100	-.1081	-.2001
247.500		.1277	-.0479	-.1680	-.1547	-.1653	-.1570	-.0922	-.0839	-.0752	-.0230	-.2158
270.000	.5151	.2075	.0103	-.1270	9.9990	-.1433	-.1815	-.1743	-.1395	-.1077	-.0089	-.2119
292.500		.3005	.0936	-.0711	-.0480	-.0851	-.1180	-.1067	-.1393	-.1124	.0069	-.2268
315.000	.7847	.4104	.1868	-.0074	-.0014	-.0396	-.0158	-.0358	-.1415	-.0798	.1954	-.2395
326.000									.0652	.0572	.1319	-.2438
346.000		.5712	.2803	.0750	.0705	-.0063	.0508	.0501	.0879	.2159	.3934	-.2482
360.000	.8483	.5431	.2656	.0717	.0807	.0588	.0527	.0876	.0433	.1970	.6373	-.2287

MACH (2) = 3.480 ALPHA (1) = 12.540 BETA = .00000 Q(PSI) = 6.8620 PO = 60.015 P = .81000

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8481	.5319	.2737	.0967	.0804	.0381	.0539	.0561	.0640	.1328	.3735	-.0644
14.000		.5257	.2682	.0998	.0798	.0189	.0392	.0528	.0556	.1475	.2946	-.0308
24.000									.0708	.1638	.2861	-.0858
45.000	.7788	.4231	.2055	.0835	.0848	.0201	.0080	.0054	.0218	.0139	.1153	-.0880
67.500		.3391	.1497	.0888	.0139	.0094	-.0185	-.0120	-.0204	-.0187	.0359	-.0790
90.000	.5078	.2388	.0843	-.0108	9.9990	-.0396	-.0480	-.0514	-.0554	-.0554	-.0390	-.0841
112.500		.1587	.0302	-.0396	-.0508	-.0638	-.0649	-.0582	-.0554	-.0520	-.0379	-.0672
135.000	.3081	.1052	-.0018	-.0559	-.0599	-.0610	-.0604	-.0587	9.9990	-.0621	-.0587	-.0745
157.500		.0748	-.0198	-.0621	-.0570	-.0542	-.0565	-.0627	-.0599	-.0706	-.0706	-.0717
180.000	.2444	.0607	-.0221	-.0627	-.0542	-.0238	-.0086	-.0170	-.0266	-.0294	-.0294	-.0678
202.500		.0719	-.0210	-.0632	-.0548	-.0531	-.0508	-.0554	-.0616	-.0610	-.0655	-.0711

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A036)

MACH (2) = 3.480 ALPHA (1) = 12.540

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.2878	.0934	-.0108	-.0599	-.0616	-.0610	-.0604	-.0627	-.0700	-.0706	-.0678	-.0756
247.500		.1435	.0167	-.0475	-.0582	-.0700	-.0672	-.0604	-.0570	-.0537	-.0317	-.0711
270.000	.4789	.2162	.0618	-.0238	9.9990	-.0531	-.0582	-.0627	-.0627	-.0604	-.0396	-.0762
292.500		.3059	.1221	.0105	.0122	-.0035	-.0227	-.0244	-.0339	-.0238	.0313	-.0785
315.000	.8210	.4129	.1920	.0499	.0370	.0454	.0195	.0099	-.0136	.0094	.1322	-.0762
326.000									.0646	.0928	.1227	-.0762
346.000		.5437	.2850	.1080	.0956	-.0136	.0595	.0528	.0900	.1570	.2681	-.0779
360.000	.8481	.5319	.2737	.0967	.0904	.0381	.0539	.0561	.0640	.1328	.3735	-.0644

MACH (3) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.023 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8943	.5139	.2669	.1296	.1485	.1094	.0956	.0968	.1145	.1498	.2745	.0061
14.000		.5128	.2632	.1246	.1410	.0956	.0830	.0818	.1044	.1473	.2392	0149
24.000									.0931	.1422	.2561	-.0114
45.000	.7784	.4244	.2102	.0956	.1019	.0653	.0565	.0540	.0754	.0792	.1132	-.0164
67.500		.3312	.1498	.0641	.0616	.0502	.0515	.0401	.0401	.0490	.0354	-.0139
90.000	.5076	.2353	.1006	.0452	9.9990	.0288	.0363	.0288	.0250	.0237	-.0039	.0164
112.500		.1624	.0603	.0301	.0301	.0200	.0275	.0238	.0200	.0212	.0049	-.0013
135.000	.3009	.1157	.0427	.0238	.0212	.0187	.0212	.0200	9.9990	.0162	-.0026	-.0076
157.500		.0880	.0338	.0187	.0212	.0124	.0187	.0149	.0452	.0112	-.0051	-.0089
180.000	.2304	.0767	.0263	.0137	.0124	.0099	.0175	.0149	.0212	.0099	.0061	-.0101
202.500		.0830	.0200	.0099	.0137	.0112	.0099	.0074	.0074	.0074	-.0051	-.0089
225.000	.2808	.1019	.0263	.0086	.0099	.0061	.0112	.0061	.0049	.0011	-.0039	-.0114
247.500		.1447	.0401	.0099	.0049	-.0013	.0036	.0011	-.0026	-.0051	.0086	-.0064
270.000	.4698	.2153	.0729	.0175	9.9990	.0036	.0049	.0036	-.0051	-.0026	.0011	-.0089
292.500		.3035	.1271	.0389	.0464	.0250	.0212	.0162	.0124	.0225	.0313	-.0127
315.000	.8263	.4168	.1926	.0704	.0666	.0540	.0452	.0364	.0187	.0464	.0968	-.0139
326.000									.0691	.0742	.0968	-.0139
346.000		.5277	.2732	.1157	.1233	.0389	.0704	.0603	.0858	.1359	.2303	-.0164
360.000	.8943	.5139	.2669	.1296	.1485	.1094	.0956	.0968	.1145	.1498	.2745	.0061

MSFC 586 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A037) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 16.660 BETA = .00000 Q(PSI) = 10.253 PO = 28.018 P = 3.8170

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.9742	.6765	.3584	.1432	.1489	.1346	.1127	.1263	.1036	.3116	.7060	-.2551
14.000		.6537	.3449	.1318	.1375	.0802	.0949	.0907	.0964	.2906	.6700	-.2220
24.000									.1284	.2968	.5845	-.2660
45.000	.8737	.4913	.2333	.0451	.0459	-.0702	.0096	-.0378	-.0793	.0508	.0723	-.2941
67.500		.3639	.1329	-.0370	-.0456	-.0818	-.0931	-.1003	-.1214	-.0615	-.0669	-.2692
90.000	.4996	.2117	.0206	-.1176	9.9990	-.1867	-.2029	-.1931	-.1701	-.1425	-.1163	-.2431
112.500		.1028	-.0661	-.1766	-.1951	-.2230	-.1898	-.1457	-.1215	-.1246	-.0608	-.2046
135.000	.2852	.0368	-.1117	-.2019	-.1925	-.1762	-.1725	-.1664	9.9990	-.1423	-.1148	-.2031
157.500		-.0023	-.1170	-.2000	-.1744	-.1287	-.1464	-.1664	-.1604	-.1578	-.1412	-.2030
180.000	.2357	-.0122	-.1223	-.1966	-.1110	-.0118	-.0140	-.0325	-.0518	-.0570	-.0752	-.1898
202.500		.0005	-.1298	-.2018	-.1592	-.0993	-.1117	-.1204	-.1302	-.1317	-.1429	-.2217
225.000	.2574	.0235	-.1166	-.2052	-.1905	-.1595	-.1607	-.2063	-.1773	-.1603	-.1401	-.2288
247.500		.0813	-.0850	-.1869	-.1997	-.2160	-.1944	-.1280	-.1110	-.1137	-.0295	-.2359
270.000	.4703	.1874	-.0050	-.1424	9.9990	-.1979	-.2187	-.1741	-.1488	-.1194	-.0337	-.2201
292.500		.3178	.1047	-.0353	-.0472	-.0865	-.1057	-.1091	-.1430	-.1114	-.0303	-.2389
315.000	.8535	.4761	.2323	.0315	.0357	-.0201	.0224	-.0065	-.1073	-.0850	.2032	-.2398
326.000									.1096	.1047	.1572	-.2439
346.000		.6914	.3647	.1432	.1436	.0794	.1081	.1051	.1828	.2877	.4737	-.2737
360.000	.9742	.6765	.3584	.1432	.1489	.1346	.1127	.1263	.1036	.3116	.7060	-.2551

MACH (2) = 3.480 ALPHA (1) = 16.560 BETA = .00000 Q(PSI) = 6.8630 PO = 60.018 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8490	.6435	.3622	.1548	.1373	.1058	.1069	.1120	.1131	.2112	.5172	-.062;
14.000		.6429	.3526	.1548	.1356	.0866	.0877	.1012	.1007	.2241	.4253	-.0001
24.000									.1187	.2286	.4282	-.0813
45.000	.8549	.4902	.2563	.0996	.1063	.0302	.0302	.0223	.0578	.0832	.1361	-.0875
67.500		.3633	.1689	.0426	.0268	.0127	-.0086	-.0063	-.0058	.0122	.0364	-.0649
90.000	.4851	.2286	.0860	-.0091	9.9990	-.0413	-.0486	-.0480	-.0542	-.0525	-.0260	-.0858
112.500		.1294	.0184	-.0441	-.0570	-.0717	-.0661	-.0587	-.0604	-.0576	-.0475	-.0672
135.000	.2403	.0674	-.0193	-.0521	-.0678	-.0711	-.0683	-.0616	9.9990	-.0610	-.0587	-.0711
157.500		.0370	-.0356	-.0678	-.0649	-.0751	-.0683	-.0672	-.0496	-.0610	-.0621	-.0706
180.000	.1778	.0280	-.0396	-.0683	-.0593	-.0255	-.0362	-.0446	-.0548	-.0559	-.0554	-.0678
202.500		.0330	-.0407	-.0694	-.0649	-.0728	-.0711	-.0666	-.0655	-.0638	-.0655	-.0711

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A037)

MACH (2) = 3.480 ALPHA (1) = 16.560

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.2224	.0550	-.0289	-.0694	-.0706	-.0711	-.0728	-.0666	-.0638	-.0616	-.0593	-.0728
247.500		.1131	-.0018	-.0565	-.0689	-.0756	-.0711	-.0666	-.0644	-.0610	-.0384	-.0756
270.000	.4603	.2048	.0583	-.0244	9.9990	-.0543	-.0582	-.0621	-.0621	-.0627	-.0396	-.0864
292.500		.3245	.1396	.0240	.0223	.0032	-.0198	-.0103	-.0210	-.0105	.0398	-.0841
315.000	.9090	.4755	.2399	.0832	.0691	.0702	.0477	.0342	.0161	.0178	.1665	-.0678
326.000									.1204	.1558	.1463	-.0717
346.000		.6435	.3718	.1666	.1531	.0189	.1080	.1046	.1463	.2252	.3983	-.0768
360.000	.9490	.6435	.3622	.1548	.1373	.1058	.1069	.1120	.1131	.2112	.5172	-.0621

MACH (3) = 4.960 ALPHA (1) = 16.470 BETA = .00000 Q(PSI) = 3.0700 PO = 90.023 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.0090	.6260	.3501	.1649	.1913	.1296	.1183	.1220	.1548	.2178	.4357	.0149
14.000		.6260	.3387	.1611	.1876	.1296	.1092	.1107	.1523	.2190	.3803	.0364
24.000									.1611	.2266	.4080	-.0064
45.000	.8502	.4798	.2543	.1157	.1183	.0666	.0590	.0590	.1107	.1132	.1422	-.0177
67.500		.3513	.1687	.0716	.0628	.0502	.0477	.0401	.0427	.0578	.0628	-.0089
90.000	.4798	.2140	.0994	.0439	9.9990	.0288	.0288	.0225	.0175	.0225	.0074	-.0164
112.500		.1346	.0565	.0250	.0200	.0137	.0175	.0149	.0112	.0137	-.0001	.0011
135.000	.2329	.0805	.0288	.0162	.0124	.0061	.0099	.0099	9.9990	.0049	-.0064	-.0114
157.500		.0578	.0212	.0124	.0124	.0074	.0099	.0061	.0464	.0061	-.0114	-.0139
180.000	.1687	.0477	.0175	.0099	.0061	.0036	.0061	.0061	.0099	-.0013	-.0064	-.0152
202.500		.0490	.0099	.0074	.0049	.0175	.0023	.0011	.0011	.0011	-.0089	-.0127
225.000	.2228	.0691	.0175	.0061	.0049	-.0001	.0036	-.0001	-.0013	-.0039	-.0089	-.0152
247.500		.1195	.0364	.0074	.0011	-.0064	-.0013	-.0026	-.0089	-.0089	.0099	-.0076
270.000	.4597	.2052	.0716	.0175	9.9990	-.0039	.0011	-.0026	-.0099	-.0064	.0074	-.0114
292.500		.3211	.1409	.0477	.0464	.0288	.0187	.0187	.0124	.0414	.0477	-.0114
315.000	.9069	.4773	.2405	.0981	.0842	.0830	5653	.0540	.0389	.0666	.1435	-.0164
326.000									.1157	.1346	.1548	-.0089
346.000		.6361	.3627	.1699	.1787	.0628	.1195	.1107	.1561	.2291	.3326	-.0101
360.000	1.0090	.6260	.3501	.1649	.1913	.1296	.1183	.1220	.1548	.2178	.4357	.0149

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A038) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 20.740 BETA = .00000 Q(PSI) = 10.225 PO = 28.010 P = 3.7900

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.0882	.7682	.4552	.2008	.2227	.2107	.1846	.1876	.1766	.4246	.8161	-.2530
14.000		.7674	.4431	.1855	.2173	.1344	.1586	.1488	.1688	.4193	.7879	-.1954
24.000									.1935	.4010	.7118	-.2572
45.000	.9285	.5523	.2881	.0849	.1110	0441	.0027	-.0108	-.0032	.0731	.1049	-.2911
67.500		.3742	.1503	-.0274	-.0308	-.0906	-.0788	-.0770	-.0940	-.0630	-.0436	-.2661
90.000	.4537	.1776	.0028	-.1331	9.9990	-.1925	-.1982	-.1936	-.1932	-.1766	-.1574	-.2752
112.500		.0402	-.1049	-.2061	-.2353	-.2266	-.1748	-.1498	-.1608	-.1506	-.0880	-.2243
135.000	.1972	-.0297	-.1539	-.2330	-.2333	-.2318	-.2439	-.2409	9.9990	-.1489	-.1404	-.2318
157.500		-.0531	-.1495	-.2236	-.2262	-.2270	-.2436	-.2383	-.1306	-.1287	-.1245	-.2020
180.000	.1522	-.0487	-.1505	-.2080	-.1001	-.0502	-.0797	-.1149	-.1308	-.1380	-.1496	-.1905
202.500		-.0436	-.1579	-.2203	-.2082	-.2017	-.2025	-.2085	-.1635	-.1446	-.1422	-.2023
225.000	.1672	-.0323	-.1594	-.2339	-.2305	-.2317	-.2498	-.2313	-.1549	-.1382	-.1426	-.2328
247.500		.0251	-.1258	-.2177	-.2404	-.2276	-.1882	-.1477	-.1436	-.1485	-.0698	-.2152
270.000	.4181	.1548	-.0286	-.1568	9.9990	-.2022	-.2155	-.1716	-.1882	-.1708	-.1306	-.2481
292.500		.3318	.1102	-.0565	-.0380	-.1008	-.0872	-.0826	-.1276	-.0815	-.0296	-.2647
315.000	.9073	.5347	.2674	.0678	.0833	.0152	.0326	.0481	-.0682	-.0656	.2309	-.2416
326.000									.1483	.1643	.1981	-.2427
346.000		.7943	.4577	.2076	.2163	.1611	.1773	.1758	.2676	.3663	.5886	-.2714
360.000	1.0882	.7882	.4552	.2008	.2227	.2107	.1846	.1876	.1766	.4246	.8161	-.2530

MACH (2) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PSI) = 6.8640 PO = 60.032 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.0516	.7652	.4609	.2264	.2061	.1948	.1740	.1830	.1835	.2641	.6638	-.0525
14.000		.7528	.4507	.2241	.2106	.1931	.1565	.1649	.1745	.2574	.5947	.0583
24.000									.1847	.3508	.6167	-.0695
45.000	.9181	.5634	.3166	.1413	.1559	.0595	.0669	.0488	.1204	.1294	.1790	-.0773
67.500		.3919	.1959	.0634	.0504	.0234	.0121	.0127	.0189	.0392	.0668	-.0486
90.000	.4567	.2208	.0826	-.0069	9.9990	-.0340	-.0458	-.0486	-.0492	-.0441	-.0142	-.0875
112.500		.1028	.0071	-.0486	-.0593	-.0734	-.0650	-.0655	-.0621	-.0588	-.0520	-.0616
135.000	.1762	.0347	-.0340	-.0667	-.0723	-.0745	-.0678	-.0667	9.9990	-.0616	-.0599	-.0745
157.500		.0054	-.0508	-.0717	-.0728	-.0768	-.0723	-.0672	-.0503	-.0678	-.0678	-.0751
180.000	.1238	.0031	-.0469	-.0695	-.0565	-.0543	-.0526	-.0576	-.0661	-.0667	-.0655	-.0745
202.500		.0020	-.0542	-.0734	-.0717	-.0796	-.0756	-.0711	-.0694	-.0693	-.0683	-.0774

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A038)

MACH (2) = 3.480 ALPHA (1) = 20.610

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.1678	.0217	-.0452	-.0740	-.0745	-.0785	-.0740	-.0717	-.0687	-.0650	-.0632	-.0790
247.500		.0820	-.0154	-.0610	-.0740	-.0790	-.0734	-.0728	-.0678	-.0638	-.0407	-.0734
270.000	.4330	.1927	.0528	-.0238	9.9990	-.0519	-.0604	-.0632	-.0593	-.0598	-.0227	-.0864
292.500		.3434	.1592	.0397	.0358	.0206	-.0069	.0076	-.0058	.0133	.0617	-.0751
315.000	.9806	.5418	.2933	.1220	.1017	.1079	.0837	.0752	.0538	.0516	.2151	-.0582
326.000									.1840	.2168	.1862	-.0599
346.000		.7480	.4695	.2387	.2236	.0744	.1768	.1768	.2472	.3068	.5291	-.0723
360.000	1.0516	.7652	.4609	.2264	.2061	.1948	.1740	.1830	.1835	.2641	.6638	-.0525

MACH (3) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(PSI) = 3.0700 PO = 90.019 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.0657	.7386	.4461	.2280	.2696	.1940	.1877	.1839	.2419	.3339	.6537	.0364
14.000		.7373	.4360	.2242	.2696	.2142	.1726	.1713	.2230	.3327	.5907	.0880
24.000									.2442	.3337	.6285	.0086
45.000	.8830	.5542	.3211	.1561	.1598	.0855	.0805	.0842	.1775	.1926	.2001	-.0089
67.500		.3841	.2001	.0905	.0817	.0653	.0590	.0553	.0616	.0893	.1069	.0036
90.000	.4395	.2253	.1094	.0515	9.9990	.0313	.0351	.0275	.0263	.0326	.0238	-.0139
112.500		.1183	.0565	.0326	.0263	.0124	.0225	.0175	.0162	.0175	.0074	.0074
135.000	.1712	.0541	.0313	.0225	.0162	.0124	.0149	.0137	9.9990	.0112	-.0064	-.0114
157.500		.0389	.0225	.0162	.0137	.0049	.0124	.0061	.0527	.0074	-.0039	-.0114
180.000	.1170	.0351	.0225	.0162	.0124	.0036	.0112	.0061	.0124	.0023	-.0089	-.0139
202.500		.0326	.0137	.0124	.0112	.0011	.0061	.0023	.0061	.0061	-.0051	-.0137
225.000	.1750	.0484	.0099	.0074	.0036	.0011	.0061	-.0013	.0011	-.0013	-.0064	-.0152
247.500		.0981	.0301	.0112	.0023	-.0039	.0011	-.0013	-.0039	-.0039	.0187	-.0013
270.000	.4383	.1989	.0767	.0238	9.9990	.0036	.0049	.0036	.0011	.0036	.0137	-.0101
292.500		.3413	.1674	.0579	.0641	.0401	.0326	.0427	.0338	.0792	.0666	-.0051
315.000	.9951	.5403	.2909	.1372	.1208	.1372	.0905	.0969	.0830	.1031	.2115	-.0026
326.000									.1762	.2291	.2153	-.0013
346.000		.7255	.4446	.2329	.2518	.1183	.1913	.1762	.2808	.3350	.5176	.0086
360.000	1.0657	.7386	.4461	.2280	.2696	.1940	.1877	.1839	.2419	.3339	.6537	.0364

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A039) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 24.870 BETA = .00000 Q(PSI) = 10.225 PO = 28.006 P = 3.7900

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.2112	.8993	.5738	.2862	.3343	.3089	.2809	.2976	.2646	.5526	.9530	-.2482
14.000		.8720	.5523	.2696	.3199	.1961	.2313	.2325	.2506	.5795	.9054	-.1464
24.000									.2712	.5380	.8356	-.2520
45.000	.9859	.6113	.3441	.1366	.1884	-.0179	.0096	.0228	.0855	.0931	.1457	-.2661
67.500		.3861	.1676	-.0081	-.0138	-.0841	-.0807	-.0504	-.0678	-.0504	-.0085	-.2637
90.000	.4105	.1496	-.0104	-.1382	9.9990	-.1984	-.1980	-.2060	-.2060	-.1912	-.1594	-.2854
112.500		-.0164	-.1398	-.2298	-.2544	-.2340	-.1912	-.1897	-.1704	-.1769	-.0933	-.2255
135.000	.0950	-.0871	-.1918	-.2641	-.2667	-.2387	-.2278	-.1775	9.9990	-.1801	-.1706	-.2458
157.500		-.0822	-.1809	-.2471	-.2861	-.2286	-.2524	-.1938	-.1586	-.1669	-.1694	-.2164
180.000	.0931	-.0830	-.1701	-.2132	-.0932	-.1375	-.1625	-.1791	-.1610	-.1606	-.1575	-.2044
202.500		-.0899	-.1797	-.2395	-.2720	-.2383	-.2436	-.2035	-.1668	-.1664	-.1732	-.2186
225.000	.0856	-.0875	-.1994	-.2618	-.2675	-.2383	-.2421	-.2100	-.1760	-.1658	-.1813	-.2453
247.500		-.0266	-.1626	-.2442	-.2673	-.2363	-.1940	-.1724	-.1770	-.1652	-.0771	-.2221
270.000	.3630	.1238	-.0520	-.1648	9.9990	-.2026	-.2124	-.2030	-.1973	-.1750	-.1510	-.2662
292.500		.3381	.1173	-.0387	-.0252	-.1034	-.0833	-.0837	-.1041	-.0470	-.0059	-.2561
315.000	.9617	.5893	.3224	.1144	.1368	.0720	.0330	.1016	-.0066	-.0316	.2815	-.2305
326.000									.2068	.2127	.2613	-.2304
346.000		.8890	.5718	.2867	.3261	.2553	.2662	.2632	.3692	.4775	.7206	-.2612
360.000	1.2112	.8993	.5738	.2862	.3343	.3089	.2809	.2976	.2646	.5526	.9530	-.2482

MACH (2) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.8640 PO = 60.031 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.2077	.8904	.5685	.3064	.2895	.2951	.2613	.2658	.2691	.3977	.8528	-.0441
14.000		.8736	.5525	.3017	.2944	.2719	.2341	.2499	.2606	.4550	.7384	.1006
24.000									.2786	.4679	.7462	-.0609
45.000	.9897	.6353	.3795	.1879	.2014	.0865	.0865	.0792	.1716	.2116	.2183	-.0672
67.500		.4161	.2200	.0826	.0679	.0431	.0307	.0397	.0459	.0927	.1041	-.0396
90.000	.4303	.2127	.0854	-.0035	9.9990	-.0374	-.0407	-.0430	-.0413	-.0317	-.0012	-.0864
112.500		.0775	-.0058	-.0537	-.0621	-.0672	-.0672	-.0655	-.0616	-.0576	-.0492	-.0610
135.000	.1220	.0037	-.0497	-.0728	-.0762	-.0734	-.0700	-.0695	9.9990	-.0633	-.0593	-.0824
157.500		-.0193	-.0605	-.0751	-.0779	-.0785	-.0706	-.0695	-.0497	-.0695	-.0694	-.0829
180.000	.0826	-.0170	-.0554	-.0728	-.0576	-.0706	-.0621	-.0689	-.0638	-.0644	-.0700	-.0830
202.500		-.0233	-.0644	-.0768	-.0768	-.0807	-.0762	-.0762	-.0768	-.0751	-.0762	-.0824

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A039)

MACH (2) = 3.480 ALPHA (1) = 24.660

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.1167	-.0097	-.0627	-.0802	-.0819	-.0790	-.0790	-.0790	-.0762	-.0751	-.0728	-.0858
247.500		.0566	-.0266	-.0667	-.0778	-.0830	-.0796	-.0807	-.0785	-.0700	-.0503	-.0700
270.000	.4026	.1812	.0504	-.0238	9.9990	-.0531	-.0605	-.0554	-.0582	-.0554	-.0109	-.0841
292.500		.3615	.1767	.0544	.0516	.0364	.0133	.0341	.0166	.0516	.1071	-.0672
315.000	1.0460	.6108	.3543	.1661	.1463	.1616	.1125	.1317	.0956	.1204	.2837	-.0526
326.000									.2470	.2798	.2455	-.0537
346.000		.8561	.5744	.3192	.3119	.1665	.2640	.2629	.3586	.4296	.7061	-.0655
360.000	1.2077	.8904	.5695	.3064	.2895	.2951	.2613	.2658	.2681	.3977	.8528	-.0441

MACH (3) = 4.960 ALPHA (1) = 24.510 BETA = .00000 Q(PSI) = 3.0700 PO = 90.023 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.2219	.8717	.5504	.2984	.3526	.2795	.2556	.2669	.3425	.5139	.9258	.0527
14.000		.8603	.5454	.2984	.3551	.3098	.2367	.2505	.2820	.4685	.8452	.1472
24.000									.3072	.4874	.8591	.0200
45.000	1.0002	.6348	.3853	.1976	.2052	.1107	.1006	.1120	.2455	.2455	.2606	-.0039
67.500		.4156	.2329	.1107	.1006	.0842	.0767	.0792	.0868	.1309	.1510	.0137
90.000	.4420	.2228	.1170	.0553	9.9990	.0313	.0376	.0338	.0326	.0414	.0414	-.0101
112.500		.1044	.0464	.0275	.0250	.0112	.0225	.0187	.0175	.0162	.0124	.0162
135.000	.1359	.0490	.0250	.0200	.0124	.0112	.0137	.0124	9.9990	.0099	-.0051	-.0076
157.500		.0326	.0200	.0175	.0149	.0086	.0124	.0099	.0666	.0086	-.0101	-.0114
180.000	.0855	.0275	.0212	.0137	.0099	.0086	.0086	.0074	.0137	.0011	-.0114	-.0127
202.500		.0225	.0086	.0099	.0061	-.0001	.0061	.0023	.0061	.0036	-.0064	-.0114
225.000	.1309	.0301	.0061	.0049	.0036	.0011	.0049	-.0001	.0036	-.0013	-.0039	-.0139
247.500		.0805	.0200	.0086	.0011	-.0013	-.0013	-.0013	-.0039	-.0026	.0212	.0036
270.000	.4269	.1926	.0767	.0263	9.9990	.0036	.0061	.0061	.0049	.0112	.0275	-.0114
292.500		.3665	.1863	.0817	.0767	.0628	.0477	.0666	.0616	.1258	.0943	-.0026
315.000	1.0783	.6209	.3513	.1762	.1636	.1964	.1183	.1447	.1208	.1472	.3022	-.0051
326.000									.2379	.3350	.2883	.0049
346.000		.8591	.5668	.3135	.3362	.1800	.2568	.2644	.4257	.5025	.7091	.0225
360.000	1.2219	.8717	.5504	.2984	.3526	.2795	.2556	.2669	.3425	.5139	.9258	.0527

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A040) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 180.000

MACH (1) = 1.960 ALPHA (1) = 28.930 BETA = .00000 Q(PSI) = 10.265 PO = 28.006 P = 3.8340

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.3271	1.0213	.6877	.4038	.4256	.4256	.3824	.3591	.3625	.6768	1.1122	-.2391
14.000		.9869	.6586	.3771	.4110	.3191	.3097	.3402	.3455	.7219	1.0261	-.1450
24.000									.3728	.6658	.9691	-.2484
45.000	1.0469	.6800	.4186	.1961	.2281	.0394	.0187	.0511	.1678	.0970	.1862	-.2479
67.500		.4123	.1945	.0180	.0022	-.0595	-.0613	-.0271	-.0452	-.0166	.0281	-.2692
90.000	.3492	.1407	-.0132	-.1409	9.9990	-.2178	-.1989	-.2095	-.2178	-.2031	-.1453	-.2947
112.500		-.0520	-.1640	-.2495	-.2668	-.2167	-.1994	-.1986	-.1979	-.1930	-.1019	-.2474
135.000	.0217	-.1346	-.2353	-.2914	-.2858	-.2458	-.2176	-.1882	9.9990	-.1987	-.1767	-.2604
157.500		-.1181	-.2116	-.2847	-.3021	-.2534	-.2489	-.2022	-.1848	-.1909	-.1944	-.2404
180.000	.0526	-.0995	-.1776	-.2232	-.1120	-.1972	-.1968	-.2126	-.1689	-.1712	-.1736	-.2252
202.500		-.1112	-.2065	-.2754	-.2954	-.2630	-.2569	-.2140	-.2027	-.2016	-.2047	-.2356
225.000	.0051	-.1370	-.2326	-.2905	-.2901	-.2412	-.2356	-.2058	-.2070	-.2040	-.1974	-.2551
247.500		-.0725	-.1909	-.2648	-.2814	-.2365	-.2188	-.1860	-.1882	-.1980	-.0936	-.2191
270.000	.3232	.1012	-.0626	-.1696	9.9990	-.2306	-.2280	-.2216	-.2205	-.2088	-.1521	-.2770
292.500		.3488	.1360	-.0212	-.0020	-.0906	-.0484	-.0593	-.0797	.0164	.0160	-.2340
315.000	1.0164	.6446	.3828	.1618	.2096	.1693	.1064	.1573	0741	.0406	.3597	-.2226
326.000									.2598	.2725	.3421	-.2156
346.000		.9986	.6739	.3943	.4248	.3766	.3604	.3529	.4872	.5945	.8738	-.2498
360.000	1.3271	1.0213	.6877	.4038	.4256	.4256	.3824	.3591	.3625	.6768	1.1122	-.2391

MACH (2) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(PSI) = 6.8630 PO = 60.020 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.3486	1.0223	.6897	.3994	.3848	.4383	.3690	.3617	.3763	.5758	1.0798	-.0221
14.000		.9968	.6692	.3889	.3805	.3726	.3105	.3517	.3619	.5964	.9366	.1322
24.000									.3853	.5725	.9355	-.0548
45.000	1.0533	.7044	.4485	.2405	.2653	.1165	.0984	.1091	.2399	.3030	.2732	-.0621
67.500		.4378	.2467	.1052	.0950	.0753	.0595	.0798	.0793	.1255	.1345	-.0294
90.000	.3989	.2014	.0831	-.0013	9.9990	-.0340	-.0345	-.0340	-.0334	-.0182	.0189	-.0841
112.500		.0545	-.0148	-.0565	-.0627	-.0694	-.0578	-.0649	-.0616	-.0587	-.0486	-.0559
135.000	.0736	-.0221	-.0610	-.0756	-.0773	-.0734	-.0705	-.0694	9.9990	-.0644	-.0604	-.0818
157.500		-.0373	-.0678	-.0785	-.0795	-.0790	-.0734	-.0711	-.0430	-.0711	-.0717	-.0835
180.000	.0488	-.0328	-.0644	-.0768	-.0689	-.0655	-.0734	-.0700	-.0734	-.0768	-.0785	-.0824
202.500		-.0396	-.0694	-.0802	-.0802	-.0824	-.0618	-.0807	-.0802	-.0802	-.0824	-.0835

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A040)

MACH (2) = 3.480 ALPHA (1) = 28.700

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.0691	-.0339	-.0734	-.0841	-.0841	-.0785	-.0835	-.0830	-.0807	-.0807	-.0796	-.0852
247.500		.0347	-.0384	-.0717	-.0813	-.0847	-.0875	-.0864	-.0869	-.0841	-.0441	-.0576
270.000	.3718	.1781	.0475	-.0217	9.9990	-.0515	-.0594	-.0487	-.0509	-.0425	-.0018	-.0830
292.500		.3791	.1965	.0719	.0714	.0505	.0471	.0466	.0415	.1227	.1497	-.0514
315.000	1.1153	.6751	.4129	.2117	.1976	.2162	.1390	.1807	.1593	.2371	.3487	-.0492
326.000									.3109	.3605	.2935	-.0311
346.000		.9671	.6916	.4150	.4093	.3226	.3592	.3558	.5271	.5818	.8842	-.0492
360.000	1.3486	1.0223	.6897	.3994	.3848	.4383	.3690	.3617	.3763	.5758	1.0798	-.0221

MACH (3) = 4.960 ALPHA (1) = 28.560 BETA = .00000 Q(PSI) = 3.0700 PO = 90.023 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.3680	.9957	.6591	.3856	.4423	.3730	.3553	.3856	.4448	.7600	1.1929	.0742
14.000		.9712	.6449	.3816	.4433	.4055	.3135	.3602	.3929	.7016	1.0947	.2228
24.000									.4069	.7369	1.1425	.0212
45.000	1.0531	.6890	.4458	.2480	.2644	.1372	.1170	.1422	.3148	.2556	.3476	.0149
67.500		.4306	.2618	.1308	.1220	.1044	.0892	.0981	.1119	.1384	.1926	.0187
90.000	.4156	.2139	.1144	.0552	9.9990	.0363	.0338	.0351	.0363	.0452	.0590	-.0114
112.500		.0868	.0452	.0263	.0250	.0112	.0212	.0175	.0162	.0162	.0162	.0263
135.000	.1019	.0376	.0175	.0149	.0074	.0061	.0099	.0099	9.9990	.0086	-.0064	-.0076
157.500		.0225	.0212	.0137	.0112	.0036	.0112	.0061	.0716	.0061	-.0076	-.0101
180.000	.0628	.0162	.0124	.0099	.0061	.0049	.0061	.0023	.0099	-.0039	-.0089	-.0114
202.500		.0200	.0086	.0074	.0074	-.0001	.0036	-.0013	.0036	.0011	-.0114	-.0114
225.000	.0994	.0200	.0061	.0061	.0036	-.0013	.0036	-.0013	.0011	-.0026	-.0114	-.0177
247.500		.0691	.0212	.0049	.0011	-.0026	-.0039	-.0039	-.0051	-.0039	.0376	.0099
270.000	.4055	.1876	.0729	.0250	9.9990	-.0001	.0061	.0099	.0049	.0187	.0427	-.0076
292.500		.3853	.2014	.0956	.0918	.0842	.0666	.0767	.0880	.1800	.1145	.0011
315.000	1.1488	.6890	.4093	.2203	.2127	.2405	.1523	.1964	.1573	.1800	.4244	.0074
326.000									.3035	.4534	.4168	.0124
346.000		.9699	.6726	.3992	.4168	.2493	.3652	.3778	.5580	.6751	.9737	.0187
360.000	1.3680	.9957	.6591	.3855	.4423	.3730	.3553	.3856	.4448	.7600	1.1929	.0742

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A041) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8630 PO = 60.026 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3457	.1587	.0229	-.0384	-.0289	-.0373	-.0430	-.0430	-.0182	-.0035	.0240	-.0734
14.000		.1362	.0099	-.0430	-.0384	-.0384	-.0384	-.0362	-.0244	.0043	.1282	-.0824
24.000									-.0092	.0296	.0652	-.0835
45.000	.3299	.1120	.0003	-.0475	-.0396	-.0260	-.0277	-.0204	-.0272	-.0108	.0797	-.0802
67.500		.1214	.0037	-.0492	-.0407	-.0306	-.0261	-.0266	-.0238	-.0272	.0026	-.0768
90.000	.3752	.1446	.0189	-.0441	9.9990	-.0379	-.0322	-.0362	-.0368	-.0339	-.0261	-.0734
112.500		.1851	.0426	-.0328	-.0374	-.0424	-.0362	-.0362	-.0374	-.0345	-.0340	-.0655
135.000	.5243	.2450	.0781	-.0153	-.0272	-.0373	-.0373	-.0418	9.9990	-.0396	-.0419	-.0627
157.500		.3059	.1182	.0082	-.0063	-.0193	-.0176	-.0244	-.0125	-.0272	-.0283	-.0632
180.000	.6894	.3515	.1554	.0302	.0144	.0054	.0049	-.0018	-.0046	-.0029	-.0047	-.0655
202.500		.4088	.1868	.0476	.0307	.0240	.0228	.0161	.0166	.0211	.0166	-.0667
225.000	.7641	.4304	.2004	.0573	.0421	.0297	.0313	.0246	.0240	.0274	.0245	-.0678
247.500		.4146	.1903	.0516	.0398	.0229	.0251	.0212	.0195	.0218	.0414	-.0774
270.000	.7046	.3729	.1655	.0353	9.9990	.0065	.0099	.0065	.0043	.0071	.0234	-.0796
292.500		.3115	.1244	.0111	.0020	-.0063	-.0024	-.0091	-.0103	.0133	.0116	-.0796
315.000	.5288	.2454	.0820	-.0126	-.0171	-.0024	-.0064	-.0165	-.0109	.0071	.0268	-.0779
326.000									-.0024	.0048	.0561	-.0745
346.000		.1756	.0432	-.0328	-.0373	-.0559	-.0497	-.0497	-.0131	-.0024	.0211	-.0774
360.000	.3457	.1587	.0229	-.0384	-.0289	-.0373	-.0430	-.0430	-.0182	-.0035	.0240	-.0734

MACH (2) = 4.960 ALPHA (1) = -8.310 BETA = .00000 Q(PSI) = 3.0700 PO = 90.025 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3236	.1611	.0868	.0578	.0603	.0578	.0464	.0527	.0490	.0553	.0086	.0023
14.000		.1397	.0641	.0490	.0414	.0389	.0364	.0376	.0338	.0490	.1006	-.0013
24.000									.0061	.0124	.0301	-.0026
45.000	.3188	.1220	.0578	.0401	.0376	.0338	.0326	.0351	.0250	.0401	.0074	-.0001
67.500		.1321	.0628	.0301	.0376	.0275	.0376	.0313	.0288	.0351	-.0013	.0086
90.000	.3652	.1485	.0616	.0288	9.9990	.0212	.0313	.0275	.0225	.0275	-.0051	.0049
112.500		.1863	.0754	.0301	.0301	.0162	.0263	.0275	.0212	.0288	.0049	.0074
135.000	.5038	.2392	.0968	.0351	.0263	.0187	.0200	.0225	9.9990	.0225	.0112	.0074
157.500		.2946	.1246	.0414	.0338	.0212	.0212	.0212	.1409	.0225	.0049	.0074
180.000	.6625	.3323	.1522	.0527	.0376	.0288	.0263	.0263	.0288	.0237	.0124	.0036
202.500		.3765	.1787	.0616	.0452	.0288	.0338	.0313	.0225	.0326	.0238	.0049

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A041)

MACH (2) = 4.860 ALPHA (1) = -8.310

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1820	.2100	.3220	.5180	.6100	.7350	.8800	.8920	.9230	.9540
THETA												
225.000	.7230	.3942	.1888	.0653	.0502	.0338	.0376	.0338	.0288	.0326	.0288	.0049
247.500		.3828	.1787	.0616	.0464	.0338	.0313	.0301	.0225	.0301	.0364	-.0013
270.000	.6625	.3476	.1611	.0490	0.9990	.0200	.0225	.0238	.0162	.0212	.0250	-.0039
292.500		.2972	.1296	.0338	.0326	.0175	.0182	.0149	.0099	.0187	.0263	-.0076
315.000	.4950	.2405	.0956	.0200	.0175	.0099	.0099	.0124	.0061	.0175	.0212	-.0114
326.000									.0137	.0175	.0250	-.0076
348.000		.1687	.0666	.0099	.0112	-.0026	-.0013	.0036	-.0013	.0074	.0099	-.0127
360.000	.3236	.1611	.0868	.0578	.0603	.0578	.0464	.0527	.0490	.0553	.0086	.0023

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A042) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 6.8640 PO = 60.028 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4234	.2016	.0460	-.0272	-.0193	-.0373	-.0283	-.0227	-.0159	.0488	.1243	-.0689
14.000		.1875	.0392	-.0306	-.0193	-.0441	-.0277	-.0215	-.0120	.0381	.1616	-.0756
24.000									-.0013	.0313	.1344	-.0813
45.000	.4276	.1706	.0330	-.0351	-.0266	-.0193	-.0221	-.0187	-.0187	-.0063	.0955	-.0745
67.500		.1795	.0380	-.0340	-.0300	-.0199	-.0148	-.0182	-.0092	-.0137	.0262	-.0700
90.000	.4555	.1941	.0482	-.0306	9.9990	-.0216	-.0131	-.0159	-.0165	-.0126	-.0064	-.0679
112.500		.2174	.0607	-.0244	-.0272	-.0244	-.0170	-.0182	-.0176	-.0148	-.0109	-.0605
135.000	.5395	.2517	.0793	-.0148	-.0227	-.0227	-.0187	-.0193	9.9990	-.0170	-.0182	-.0587
157.500		.2799	.0990	-.0041	-.0136	-.0153	-.0131	-.0170	-.0012	-.0148	-.0137	-.0554
180.000	.6150	.3017	.1181	.0071	-.0024	-.0052	-.0035	-.0047	-.0086	-.0059	-.0103	-.0548
202.500		.3249	.1299	.0138	.0026	.0014	.0020	-.0019	-.0019	.0020	-.0013	-.0559
225.000	.6449	.3338	.1355	.0172	.0054	.0031	.0054	.0009	.0014	.0037	.0031	-.0582
247.500		.3256	.1294	.0150	.0060	.0003	.0032	.0009	.0009	.0037	.0172	-.0557
270.000	.6181	.3098	.1210	.0088	9.9990	-.0024	.0015	-.0001	-.0018	.0043	.0167	-.0589
292.500		.2775	.1028	-.0024	-.0030	-.0030	-.0002	-.0041	-.0047	-.0058	.0330	-.0595
315.000	.5406	.2433	.0810	-.0142	-.0114	-.0012	-.0024	-.0153	-.0210	-.0103	.0983	-.0689
326.000									.0009	.0031	.0916	-.0672
346.000		.2309	.0731	-.0153	-.0193	-.0424	-.0294	-.0289	-.0159	.0488	.1034	-.0740
360.000	.4234	.2015	.0460	-.0272	-.0193	-.0373	-.0283	-.0227	-.0159	.0488	.1243	-.0689

MACH (2) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0700 PO = 90.025 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3702	.2001	.1044	.0679	.0729	.0729	.0527	.1636	.0616	.0742	.0578	.0049
14.000		.1838	.0868	.0578	.0528	.0440	.0465	.0780	.0427	.0616	.0931	-.0051
24.000									.0175	.0238	.0553	-.0076
45.000	.4143	.1737	.0842	.0515	.0515	.0389	.0401	.0817	.0326	.0502	.0288	.0011
67.500		.1787	.0767	.0351	.0376	.0351	.0389	.0452	.0326	.0401	.0036	.0086
90.000	.4446	.1926	.0779	.0376	9.9990	.0250	.0364	.0427	.0263	.0376	.0011	.0137
112.500		.2140	.0868	.0326	.0338	.0275	.0313	.0401	.0263	.0338	.0124	.0389
135.000	.5150	.2379	.0956	.0351	.0288	.0200	.0250	.0351	9.9990	.0250	.0112	.0364
157.500		.2657	.1069	.0351	.0313	.0200	.0212	.0301	.1460	.0250	.0074	.0376
180.000	.5817	.2807	.1182	.0376	.0288	.0187	.0212	.0300	.0263	.0200	.0074	.0389
202.500		.2959	.1271	.0389	.0326	.0200	.0200	.0288	.0162	.0225	.0074	.0389

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A042)

MACH (2) = 4.960 ALPHA (1) = -4.290

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6046	.3072	.1372	.0414	.0326	.0200	.0250	.0326	.0176	.0225	.0124	.0414
247.500		.3022	.1321	.0376	.0313	.0162	.0200	.0338	.0124	.0162	.0225	.0074
270.000	.5831	.2870	.1195	.0326	9.9990	.0149	.0149	.0338	.0099	.0187	.0187	-.0001
292.500		.2644	.1107	.0250	.0301	.0212	.0149	.0351	.0112	.0175	.0187	-.0013
315.000	.5139	.2316	.0880	.0175	.0200	.0099	.0124	.0338	-.0026	.0175	.0300	-.0076
326.000									.0086	.0174	.0338	-.0127
346.000		.2216	.0842	.0162	.0162	.0036	.0124	.0351	.0011	.0225	.0502	-.0089
360.000	.3702	.2001	.1044	.0679	.0729	.0729	.0527	.1636	.0616	.0742	.0578	.0049

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A043) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8640 PO = 60.034 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4990	.2496	.0777	-.0136	.0038	-.0108	-.0198	-.0142	.0021	.0449	.1629	-.0639
14.000		.2472	.0776	-.0136	.0049	-.0125	-.0238	-.0165	-.0058	.0550	.1441	-.0678
24.000									.0030	.0545	.1277	-.0796
45.000	.5353	.2403	.0764	-.0159	-.0047	-.0047	-.0143	-.0171	-.0159	.0009	.1007	-.0751
67.500		.2493	.0831	-.0137	-.0120	-.0086	-.0092	-.0114	-.0052	-.0109	.0369	-.0695
90.000	.5392	.2499	.0814	-.0131	9.9990	-.0126	-.0058	-.0103	-.0109	-.0081	.0058	-.0684
112.500		.2523	.0838	-.0120	-.0159	-.0131	-.0069	-.0080	-.0091	-.0069	.0143	-.0656
135.000	.5465	.2555	.0826	-.0137	-.0204	-.0131	-.0092	-.0092	9.9990	-.0064	-.0091	-.0604
157.500		.2529	.0849	-.0125	-.0182	-.0148	-.0091	-.0085	.0088	-.0058	-.0103	-.0576
180.000	.5375	.2422	.0832	-.0125	-.0176	-.0142	-.0091	-.0091	-.0063	-.0052	-.0103	-.0554
202.500		.2476	.0809	-.0137	-.0199	-.0137	-.0103	-.0092	-.0075	-.0047	-.0109	-.0554
225.000	.5296	.2478	.0798	-.0148	-.0204	-.0142	-.0103	-.0097	-.0080	-.0058	-.0088	-.0611
247.500		.2465	.0781	-.0143	-.0193	-.0148	-.0092	-.0081	-.0081	-.0069	.0075	-.0689
270.000	.5336	.2460	.0786	-.0143	9.9990	-.0176	-.0064	-.0052	-.0120	-.0058	.0043	-.0723
292.500		.2405	.0764	-.0159	-.0103	-.0153	-.0024	-.0114	-.0069	-.0108	.0251	-.0751
315.000	.5457	.2388	.0764	-.0170	-.0091	.0009	-.0142	-.0170	-.0136	-.0159	.0708	-.0790
326.000									.0206	.0133	.0504	-.0796
346.000		.2723	.0954	-.0036	.0064	-.0464	-.0171	-.0171	.0155	.0538	.0998	-.0797
360.000	.4990	.2496	.0777	-.0136	.0038	-.0108	-.0198	-.0142	.0021	.0449	.1629	-.0639

MACH (2) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0700 PO = 90.024 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4772	.2379	.1183	.0742	.0792	.0729	.0578	.0679	.0616	.0742	.0540	-.0001
14.000		.2367	.1031	.0628	.0590	.0527	.0452	.0477	.0427	.0628	.1283	-.0039
24.000									.0200	.0326	.0830	-.0089
45.000	.5252	.2405	.1057	.0553	.0553	.0414	.0427	.0515	.0338	.0452	.0401	-.0064
67.500		.2493	.1057	.0452	.0477	.0414	.0439	.0553	.0351	.0414	.0162	-.0026
90.000	.5290	.2468	.1069	.0452	9.9990	.0326	.0389	.0578	.0301	.0364	.0011	-.0026
112.500		.2417	.0981	.0338	.0364	.0288	.0313	.0578	.0250	.0338	.0162	.0263
135.000	.5189	.2417	.0994	.0351	.0313	.0225	.0263	.0603	9.9990	.0250	.0086	.0263
157.500		.2354	.0943	.0313	.0288	.0212	.0238	.0603	.1598	.0263	.0074	.0275
180.000	.5038	.2241	.0905	.0288	.0225	.0162	.0200	.0616	.0238	.0175	.0074	.0288
202.500		.2266	.0880	.0275	.0212	.0162	.0182	.0641	.0162	.0212	.0074	.0288

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A043)

MACH (2) = 4.960 ALPHA (1) = -.280

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4962	.2266	.0905	.0250	.0200	.0162	.0162	.0666	.0137	.0175	.0049	.0275
247.500		.2279	.0893	.0238	.0200	.0124	.0149	.0288	.0099	.0175	.0162	.0011
270.000	.4987	.2279	.0880	.0200	9.9990	.0112	.0112	.0212	.0074	.0162	.0162	-.0001
292.500		.2228	.0842	.0200	.0263	.0175	.0124	.0200	.0049	.0124	.0212	-.0064
315.000	.5301	.2266	.0842	.0162	.0212	.0074	.0112	.0212	-.0026	.0112	.0326	-.0064
326.000									.0187	.0200	.0351	-.0127
346.000		.2594	.1044	.0225	.0301	.0049	.0061	.0250	.0099	.0313	.0527	-.0139
360.000	.4772	.2379	.1183	.0742	.0792	.0729	.0578	.0679	.0616	.0742	.0540	-.0001

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A044) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1088.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 6.8630 PO = 60.025 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8800	.8920	.9230	.9540
THETA												
.000	.5770	.2964	.1132	.0032	.0303	.0066	-.0091	-.0091	-.0046	.0777	.1458	-.0644
14.000		.3143	.1187	.0088	.0342	-.0193	-.0131	-.0091	-.0029	.0652	.1649	-.0728
24.000									.0118	.0686	.1490	-.0836
45.000	.6525	.3237	.1333	.0144	.0240	.0234	.0014	-.0052	-.0035	.0020	.1035	-.0694
67.500		.3284	.1345	.0150	.0082	.0065	.0049	-.0029	.0032	-.0012	.0403	-.0796
90.000	.6212	.3079	.1209	.0087	9.9990	-.0013	.0003	-.0064	-.0103	-.0058	.0059	-.0723
112.500		.2839	.1063	-.0007	-.0091	-.0120	-.0114	-.0131	-.0153	-.0136	.0122	-.0683
135.000	.5420	.2568	.0866	-.0120	-.0182	-.0182	-.0170	-.0198	9.9990	-.0192	-.0182	-.0589
157.500		.2207	.0657	-.0221	-.0283	-.0249	-.0198	-.0193	.0009	-.0176	-.0171	-.0678
180.000	.4552	.1907	.0516	-.0295	-.0306	-.0221	-.0178	-.0159	-.0148	-.0148	-.0193	-.0683
202.500		.1802	.0387	-.0362	-.0368	-.0221	-.0165	-.0159	-.0159	-.0125	-.0143	-.0657
225.000	.4212	.1779	.0370	-.0368	-.0362	-.0204	-.0153	-.0125	-.0103	-.0058	-.0064	-.0661
247.500		.1783	.0369	-.0368	-.0374	-.0227	-.0159	-.0137	-.0126	-.0103	.0043	-.0678
270.000	.4423	.1896	.0459	-.0323	9.9990	-.0255	-.0159	-.0189	-.0165	-.0120	-.0007	-.0694
292.500		.2071	.0561	-.0289	-.0188	-.0154	-.0233	-.0238	-.0193	-.0250	.0223	-.0689
315.000	.5539	.2410	.0742	-.0198	-.0215	-.0103	-.0265	-.0249	-.0368	-.0074	.0810	-.0655
326.000									-.0058	.0065	.0893	-.0802
346.000		.3160	.1193	.0049	.0218	-.0334	-.0029	-.0063	-.0108	.0708	.1361	-.0796
360.000	.5770	.2964	.1132	.0032	.0303	.0066	-.0091	-.0091	-.0046	.0777	.1458	-.0644

MACH (2) = 4.960 ALPHA (1) = 3.730 BETA = .00000 Q(PSI) = 3.0700 PO = 90.031 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5655	.2808	.1359	.0742	.0805	.0666	.0553	.0628	.0578	.0716	.0905	-.0013
14.000		.3005	.1319	.0677	.0627	.0501	.0463	.0476	.0426	.0627	.1019	-.0089
24.000									.0275	.0414	.0880	-.0114
45.000	.6272	.3186	.1485	.0653	.0641	.0502	.0477	.0553	.0376	.0502	.0502	-.0101
67.500		.3198	.1460	.0540	.0502	.0401	.0452	.0540	.0364	.0389	.0301	-.0101
90.000	.6020	.2997	.1296	.0502	9.9990	.0301	.0376	.0578	.0263	.0326	.0099	-.0101
112.500		.2707	.1132	.0427	.0364	.0225	.0288	.0590	.0187	.0250	.0124	.0414
135.000	.5101	.2404	.1031	.0363	.0326	.0174	.0225	.0300	9.9990	.0225	.0011	.0061
157.500		.2064	.0894	.0263	.0250	.0174	.0187	.0288	.1711	.0200	.0011	.0112
180.000	.4231	.1761	.0729	.0237	.0200	.0111	.0162	.0326	.0250	.0149	-.0013	.0124
202.500		.1636	.0616	.0175	.0137	.0074	.0124	.0326	.0112	.0137	-.0013	.0011

MSFC 596 (TA-2F) HCR0200 EXTERNAL TANK, T1 (R1A044)

MACH (2) = 4.980 ALPHA (1) = 3.730

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.3879	.1611	.0590	.0137	.0137	.0137	.0124	.0351	.0112	.0137	.0011	-.0076
247.500		.1624	.0540	.0099	.0074	.0074	.0049	.0338	-.0001	.0099	.0124	-.0039
270.000	.4168	.1762	.0578	.0011	9.9990	-.0013	.0023	.0351	-.0001	.0074	.0086	-.0114
292.500		.1913	.0641	.0074	.0162	.0023	.0036	.0364	-.0013	.0061	.0187	-.0114
315.000	.5239	.2266	.0842	.0162	.0200	.0074	.0074	.0401	.0011	.0137	.0149	-.0139
326.000									.0099	.0137	.0112	-.0139
346.000		.2883	.1183	.0301	.0401	.0074	.0137	.0401	.0124	.0313	.0679	-.0164
360.000	.5655	.2808	.1359	.0742	.0805	.0666	.0553	.0628	.0578	.0716	.0905	-.0013

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A045) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(PSI) = 6.8640 PO = 60.030 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6373	.3543	.1531	.0285	.0539	.0319	.0099	.0065	.0094	.0725	.2534	-.0756
14.000		.3881	.1711	.0398	.0533	-.0001	.0071	.0099	.0150	.0860	.1958	-.0464
24.000									.0460	.1175	.1536	-.0796
45.000	.7750	.4158	.1942	.0539	.0578	.0595	.0325	.0189	.0308	.0178	.1440	-.0683
67.500		.4169	.1942	.0516	.0392	.0268	.0291	.0167	.0257	.0161	.0629	-.0830
90.000	.7046	.3695	.1644	.0359	9.9990	.0111	.0105	.0020	-.0046	.0009	.0178	-.0757
112.500		.3119	.1276	.0133	-.0024	-.0092	-.0148	-.0199	-.0255	-.0255	.0003	-.0734
135.000	.5305	.2510	.0859	-.0114	-.0244	-.0334	-.0351	-.0424	9.9990	-.0469	-.0458	-.0745
157.500		.1909	.0505	-.0300	-.0379	-.0418	-.0379	-.0418	-.0176	-.0418	-.0452	-.0740
180.000	.3772	.1451	.0234	-.0435	-.0475	-.0385	-.0345	-.0362	-.0362	-.0340	-.0323	-.0751
202.500		.1259	.0099	-.0497	-.0464	-.0385	-.0334	-.0430	-.0435	-.0334	-.0317	-.0700
225.000	.3265	.1176	.0043	-.0525	-.0458	-.0283	-.0153	-.0091	-.0103	-.0058	-.0075	-.0712
247.500		.1181	.0026	-.0537	-.0481	-.0345	-.0182	-.0204	-.0188	-.0176	-.0052	-.0644
270.000	.3693	.1399	.0133	-.0492	9.9990	-.0413	-.0395	-.0357	-.0266	-.0221	-.0030	-.0661
292.500		.1744	.0335	-.0396	-.0334	-.0334	-.0509	-.0464	-.0492	-.0233	-.0024	-.0734
315.000	.5556	.2403	.0735	-.0204	-.0210	-.0272	-.0503	-.0571	-.0497	-.0148	.0014	-.0774
326.000									-.0188	-.0047	-.0255	-.0768
346.000		.3310	.1485	.0279	.0465	-.0097	.0161	-.0030	.0228	.0510	.1817	-.0813
360.000	.6373	.3543	.1531	.0285	.0539	.0319	.0099	.0065	.0094	.0725	.2534	-.0756

MACH (2) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(PSI) = 3.0710 PO = 90.037 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6499	.3425	.1636	.0905	.0994	.0880	.0704	.0742	.0729	.0956	.1523	-.0001
14.000		.3853	.1813	.0893	.0792	.0691	.0641	.0679	.0578	.0880	.1750	.0049
24.000									.0490	.0855	.1447	-.0039
45.000	.7734	.4192	.2026	.0918	.0642	.0703	.0678	.0715	.0527	.0640	.0968	-.0051
67.500		.4155	.2051	.0829	.0716	.0590	.0628	.0766	.0527	.0552	.0565	-.0102
90.000	.6925	.3689	.1799	.0779	9.9990	.0452	.0527	.0792	.0414	.0464	.0225	-.0127
112.500		.3059	.1371	.0540	.0439	.0300	.0363	.0779	.0263	.0313	.0175	.0301
135.000	.5025	.2403	.1018	.0401	.0338	.0187	.0237	.0791	9.9999	.0199	-.0001	.0326
157.500		.1837	.0766	.0300	.0288	.0174	.0174	.0829	.1900	.0225	-.0039	.0326
180.000	.3450	.1372	.0590	.0225	.0187	.0175	.0137	.0855	.0250	.0124	-.0076	.0313
202.500		.1182	.0452	.0174	.0187	.0124	.0137	.0855	.0099	.0137	-.0114	.0326

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A045)

MACH (2) = 4.960 ALPHA (1) = 7.750

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.2996	.1081	.0376	.0111	.0137	.0124	.0124	.0855	.0099	.0174	.0049	.0330
247.500		.1132	.0401	.0112	.0124	.0023	.0099	.0263	.0023	.0124	.0112	-.0064
270.000	.3626	.1309	.0401	.0074	9.9990	.0162	.0023	.0225	-.0001	.0074	.0074	-.0127
292.500		.1624	.0565	.0074	.0162	.0137	.0036	.0250	-.0001	.0049	.0011	-.0076
315.000	.5328	.2329	.0830	.0162	.0200	-.0001	-.0001	.0250	-.0076	.0023	.0074	-.0127
326.000									.0049	.0099	.0011	-.0177
346.000		.3236	.1498	.0477	.0590	.0200	.0288	.0288	.0288	.0578	.1195	-.0190
360.000	.6499	.3425	.1636	.0905	.0994	.0880	.0704	.0742	.0729	.0956	.1523	-.0001

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A046) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(PSI) = 6.8630 PO = 60.025 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7035	.4180	.1976	.0545	.0810	.0347	.0370	.0257	.0302	.1306	.3446	-.0723
14.000		.4744	.2286	.0759	.0821	.0229	.0325	.0404	.0488	.1379	.2443	-.0283
24.000									.0961	.1637	.2061	-.0756
45.000	.8956	.5178	.2681	.1012	.1018	.0877	.0691	.0545	.0635	.0539	.2065	-.0565
67.500		.5082	.2596	.0939	.0753	.0578	.0556	.0471	.0590	.0454	.1018	-.0745
90.000	.7759	.4332	.2117	.0657	9.9990	.0268	.0313	.0173	.0144	.0184	.0415	-.0751
112.500		.3323	.1463	.0257	.0032	-.0091	-.0131	-.0182	-.0244	-.0238	.0054	-.0734
135.000	.5079	.2433	.0838	-.0114	-.0272	-.0430	-.0463	-.0508	9.9990	-.0576	-.0588	-.0779
157.500		.1603	.0324	-.0374	-.0526	-.0621	-.0588	-.0582	-.0435	-.0543	-.0576	-.0762
180.000	.3023	.1017	.0003	-.0543	-.0599	-.0582	-.0531	-.0571	-.0548	-.0537	-.0554	-.0762
202.500		.0781	-.0171	-.0610	-.0565	-.0616	-.0633	-.0627	-.0565	-.0531	-.0570	-.0756
225.000	.2461	.0691	-.0204	-.0621	-.0559	-.0317	-.0035	-.0232	-.0227	-.0238	-.0260	-.0779
247.500		.0719	-.0227	-.0655	-.0582	-.0475	-.0430	-.0486	-.0430	-.0379	-.0238	-.0757
270.000	.2972	.0972	-.0092	-.0605	9.9990	-.0565	-.0554	-.0447	-.0430	-.0272	-.0272	-.0819
292.500		.1435	.0178	-.0486	-.0413	-.0531	-.0604	-.0632	-.0463	-.0306	-.0368	-.0852
315.000	.5412	.2326	.0719	-.0198	-.0131	-.0745	-.0694	-.0717	-.0537	-.0514	-.0261	-.0903
326.000									-.0430	-.0238	-.0649	-.0903
346.000		.3553	.1936	.0555	.0769	.0228	.0431	.0240	.0707	.1012	.3154	-.0914
360.000	.7035	.4180	.1976	.0545	.0810	.0347	.0370	.0257	.0302	.1306	.3446	-.0723

MACH (2) = 4.980 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0710 PO = 90.038 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7192	.4208	.2140	.1089	.1057	.0943	.0855	.0792	.0968	.1246	.2757	.0149
14.000		.4761	.2354	.1157	.0943	.0742	.0779	.0716	.0855	.1334	.2883	.0225
24.000									.0868	.1346	.2190	-.0051
45.000	.8943	.5151	.2644	.1220	.1019	.0931	.0943	.0754	.0905	.0830	.1649	.0036
67.500		.4962	.2468	.1107	.0880	.0653	.0817	.0691	.0742	.0754	.1120	-.0013
90.000	.7681	.4218	.2084	.0905	9.9990	.0565	.0628	.0540	.0515	.0615	.0578	-.0051
112.500		.3273	.1535	.0640	.0464	.0338	.0426	.0351	.0351	.0414	.0313	-.0039
135.000	.4924	.2328	.0959	.0401	.0212	.0187	.0250	.0200	9.9990	.0212	.0036	-.0089
157.500		.1623	.0666	.0288	.0187	.0074	.0225	.0149	.0540	.0200	-.0039	-.0114
180.000	.2795	.1107	.0439	.0212	.0111	.0061	.0174	.0111	.0149	.0099	-.0026	-.0101
202.500		.0867	.0250	.0124	.0061	.0036	.0049	.0036	.0074	.0099	-.0039	-.0089

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A046)

MACH (2) = 4.860 ALPHA (1) = 12.450

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.2265	.0779	.0187	.0099	.0036	.0086	.0149	.0086	.0137	.0149	.0074	-.0101
247.500		.0817	.0212	.0074	.0011	.0036	.0074	.0049	.0049	.0086	.0023	-.0051
270.000	.2883	.1031	.0263	.0111	9.9990	-.0013	.0036	.0036	.0011	.0061	-.0064	-.0114
292.500		.1447	.0401	.0061	.0111	.0049	.0036	-.0001	-.0001	.0011	-.0114	-.0165
315.000	.5340	.2379	.0867	.0237	.0263	-.0051	.0036	-.0001	-.0028	.0036	-.0076	-.0139
326.030									.0061	.0149	-.0114	-.0164
346.000		.3613	.1862	.0729	.0779	.0363	.0552	.0376	.0640	.1044	.2228	-.0164
360.000	.7192	.4206	.2140	.1069	.1057	.0943	.0855	.0792	.0969	.1246	.2757	.0149

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A047) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 16.560 BETA = .00000 Q(PSI) = 6.8630 PO = 60.022 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7878	.4924	.2506	.0945	.1131	.0573	.0810	.0567	.0798	.2010	.4676	-.0666
14.000		.5657	.2988	.1232	.1255	.0691	.0691	.0832	.0939	.2033	.3701	-.0001
24.000									.1441	.2591	.2867	-.0683
45.000	1.0279	.6280	.3513	.1609	.1474	.1445	.1203	.1057	.1141	.1085	.2974	-.0452
67.500		.6074	.3402	.1492	.1255	.1058	.0967	.0934	.1091	.0900	.1558	-.0655
90.000	.8492	.4975	.2641	.1024	9.9990	.0556	.0590	.0443	.0426	.0488	.0764	-.0717
112.500		.3611	.1683	.0426	.0156	-.0012	-.0052	-.0108	-.0148	-.0136	.0218	-.0751
135.000	.4834	.2343	.0843	-.0103	-.0317	-.0435	-.0520	-.0542	9.9990	-.0593	-.0576	-.0824
157.500		.1316	.0178	-.0447	-.0599	-.0723	-.0672	-.0638	-.0475	-.0610	-.0655	-.0818
180.000	.2314	.0640	-.0204	-.0633	-.0717	-.0667	-.0661	-.0667	-.0638	-.0627	-.0644	-.0813
202.500		.0387	-.0373	-.0689	-.0689	-.0796	-.0706	-.0689	-.0644	-.0621	-.0644	-.0790
225.000	.1762	.0330	-.0373	-.0683	-.0621	-.0187	-.0294	-.0396	-.0446	-.0463	-.0492	-.0796
247.500		.0336	-.0390	-.0689	-.0683	-.0621	-.0672	-.0531	-.0548	-.0525	-.0384	-.0734
270.000	.2354	.0561	-.0322	-.0700	9.9990	-.0711	-.0570	-.0565	-.0542	-.0475	-.0497	-.0858
292.500		.1158	.0014	-.0548	-.0492	-.0537	-.0723	-.0717	-.0588	-.0531	-.0559	-.0914
315.000	.5014	.2264	.0731	-.0159	-.0012	-.0852	-.0813	-.0768	-.0683	-.0570	-.0328	-.0937
326.000									-.0554	.0082	-.0571	-.0965
345.000		.3994	.2512	.0911	.1108	.0764	.0753	.0674	.1401	.1587	.4155	-.0903
360.000	.7878	.4924	.2506	.0945	.1131	.0573	.0810	.0567	.0798	.2010	.4676	-.0666

MACH (2) = 4.960 ALPHA (1) = 16.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.027 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.7845	.4849	.2518	.1183	.1120	.1044	.0981	.1258	.1283	.1984	.4054	.0149
14.000		.5567	.2984	.1359	.1220	.1435	.0968	.1233	.1233	.2090	.3715	.0565
24.000									.1497	.2216	.3299	.0011
45.000	1.0241	.6235	.3476	.1624	.1485	.1422	.1384	.1485	.1510	.1233	.2833	.0137
67.500		.6020	.3425	.1535	.1309	.1183	.1120	.1372	.1271	.1170	.1850	-.0001
90.000	.8490	.4923	.2694	.1157	9.9990	.0829	.0792	.0993	.0754	.0766	.1031	-.0051
112.500		.3551	.1838	.0691	.0905	.0452	.0439	.0653	.0414	.0364	.0452	.0263
135.000	.4723	.2291	.1044	.0351	.0288	.0275	.0187	.0439	9.9990	.0162	.0023	.0162
157.500		.1334	.0565	.0099	.0175	.0162	.0112	.0351	.0515	.0074	-.0051	.0162
180.000	.2203	.0792	.0401	.0112	.0149	.0112	.0099	.0338	.0149	.0061	-.0089	.0137
202.500		.0527	.0187	.0049	.0074	.0124	.0061	.0288	.0074	.0061	-.0064	.0124

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (RIA047)

MACH (2) = 4.960 ALPHA (1) = 16.450

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.1750	.0477	.0225	.0023	.0061	.0112	.0049	.0351	.0124	.0074	-.0039	.0137
247.500		.0464	.0162	.0023	.0049	.0099	.0061	.0275	.0023	.0023	.0099	.0036
270.000	.2304	.0653	.0175	-.0001	9.9990	.0036	.0011	.0263	.0036	-.0026	-.0026	-.0051
292.500		.1195	.0389	.0023	.0182	.0099	-.0001	.0250	.0023	-.0013	-.0039	-.0064
315.000	.4898	.2178	.0918	.0187	.0275	.0049	-.0026	.0225	-.0026	-.0001	.0023	-.0051
326.000									.0061	.0112	.0049	-.0101
346.000		.4181	.2505	.1031	.0968	.0452	.0830	.1006	.1296	.1913	.3602	-.0013
360.000	.7845	.4849	.2518	.1183	.1120	.1044	.0981	.1258	.1283	.1964	.4054	.0149

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A048) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PSI) = 6.6640 PO = 60.029 P = .81000

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8785	.5708	.3166	.1407	.1418	.0776	.1277	.0556	.1384	.2929	.5956	-.0570
14.000		.6615	.3741	.1785	.1796	.1255	.1165	.1401	.1621	.2912	.4488	.0251
24.000									.2190	.3586	.3998	-.0554
45.000	1.1559	.7478	.4473	.2292	.2072	.2151	.1864	.1745	.1683	.1734	.4370	-.0362
67.500		.7151	.4248	.2095	.1818	.1621	.1480	.1508	.1700	.1475	.2331	-.0508
90.000	.9125	.5654	.3231	.1440	9.9990	.0910	.0955	.0803	.0931	.0893	.1248	-.0655
112.500		.3840	.1930	.0606	.0307	.0155	.0116	.0042	.0031	.0042	.0477	-.0694
135.000	.4533	.2251	.0837	-.0081	-.0312	-.0469	-.0486	-.0520	9.9990	-.0554	-.0520	-.0847
157.500		.1023	.0031	-.0520	-.0683	-.0757	-.0700	-.0667	-.0481	-.0621	-.0655	-.0841
180.000	.1671	.0318	-.0368	-.0700	-.0785	-.0745	-.0695	-.0689	-.0638	-.0633	-.0655	-.0892
202.500		.0065	-.0520	-.0745	-.0717	-.0779	-.0751	-.0700	-.0661	-.0632	-.0651	-.0858
225.000	.1231	.0071	-.0492	-.0723	-.0621	-.0587	-.0486	-.0587	-.0593	-.0610	-.0638	-.0852
247.500		.0037	-.0508	-.0740	-.0751	-.0661	-.0706	-.0644	-.0745	-.0711	-.0542	-.0878
270.000	.1795	.0262	-.0452	-.0762	9.9990	-.0790	-.0717	-.0723	-.0723	-.0655	-.0605	-.0892
292.500		.0933	-.0092	-.0599	-.0526	-.0599	-.0774	-.0757	-.0723	-.0565	-.0593	-.0903
315.000	.4693	.2162	.0736	-.0091	-.0227	-.0880	-.0841	-.0782	-.0756	-.0503	-.0492	-.0948
326.000									-.0616	.0566	-.0582	-.0959
346.000		.4730	.3169	.1434	.1355	.1474	.1220	.1333	.1986	.2065	.5299	-.0836
360.000	.8785	.5709	.3166	.1407	.1418	.0776	.1277	.0556	.1384	.2929	.5956	-.0570

MACH (2) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(PSI) = 3.0700 PO = 90.025 P = .17800

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.8855	.5556	.3010	.1511	.1435	.1284	.1347	.1334	.1876	.3351	.6222	.0250
14.000		.6348	.3627	.1787	.1687	.1989	.1359	.1372	.1938	.3526	.5403	.0956
24.000									.2518	.3438	.4723	.0061
45.000	1.1274	.7243	.4383	.2241	.2140	.2014	.2077	.1901	.2493	.1825	.4446	.0288
67.500		.6991	.4205	.2090	.1850	.1699	.1636	.1649	.1964	.1750	.2720	.0074
90.000	.8805	.5617	.3274	.1535	9.9990	.1145	.1107	.1019	.1170	.1145	.1573	-.0039
112.500		.3841	.2027	.0855	.1006	.0603	.0527	.0452	.0553	.0490	.0729	-.0001
135.000	.4332	.2290	.1132	.0414	.0363	.0275	.0263	.0174	9.9990	.0187	.0074	-.0152
157.500		.1157	.0527	.0200	.0200	.0200	.0149	.0036	.0578	.0099	-.0089	-.0190
180.000	.1573	.0590	.0275	.0099	.0112	.0124	.0086	-.0013	.0124	-.0001	-.0089	-.0190
202.500		.0351	.0112	.0049	.0086	.0124	.0049	-.0051	.0074	.0036	-.0089	-.0215

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A048)

MACH (2) = 4.960 ALPHA (1) = 20.490

SECTION 1 TANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.1183	.0351	.0162	.0036	.0074	.0137	.0061	-.0013	.0099	.0911	-.0064	-.0215
247.500		.0263	.0086	.0011	.0023	.0124	.0023	-.0102	.0023	-.0039	.0086	.0023
270.000	.1838	.0477	.0149	.0011	9.9990	.0036	.0011	-.0039	.0023	-.0064	-.0039	-.0051
292.500		.1031	.0313	.0011	.0175	.0061	-.0001	-.0089	-.0001	-.0076	-.0114	-.0051
315.000	.4458	.2115	.0905	.0250	.0301	-.0001	-.0013	-.0114	-.0064	-.0001	.0074	-.0051
326.000									.0074	.0716	.0074	-.0101
346.000		.4887	.2997	.1409	.1321	.0729	.1283	.1208	.2039	.2820	.5668	.0074
360.000	.8855	.5556	.3010	.1511	.1435	.1284	.1347	.1334	.1876	.3351	.6222	.0250

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A049) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 8.6640 PO = 60.030 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1060	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.9733	.6508	.3870	.1942	.1875	.1120	.1903	.1841	.2168	.3842	.7547	-.0424
14.000		.7592	.4578	.2409	.2471	.1902	.1767	.2195	.2437	.3496	.6001	.0511
24.000									.3198	.4693	.5339	-.0374
45.000	1.2821	.8708	.5519	.3085	.2854	.3074	.2736	.2657	.2268	.2403	.5223	-.0300
67.500		.8257	.5187	.2826	.2544	.2358	.2178	.2268	.2460	.2217	.3899	-.0328
90.000	.9739	.6319	.3812	.1890	9.9990	.1344	.1406	.1271	.1338	.1383	.1864	-.0593
112.500		.4067	.2157	.0798	.0499	.0319	.0297	.0235	.0240	.0257	.0803	-.0633
135.000	.4217	.2144	.0837	-.0069	-.0312	-.0464	-.0458	-.0485	9.9990	-.0514	-.0441	-.0830
157.500		.0781	-.0058	-.0554	-.0672	-.0751	-.0678	-.0678	-.0441	-.0582	-.0616	-.0847
180.000	.1090	.0009	-.0537	-.0768	-.0824	-.0796	-.0728	-.0695	-.0627	-.0621	-.0627	-.0909
202.500		-.0171	-.0610	-.0774	-.0819	-.0807	-.0768	-.0717	-.0655	-.0644	-.0695	-.0903
225.000	.0809	-.0114	-.0554	-.0751	-.0599	-.0728	-.0570	-.0644	-.0734	-.0728	-.0751	-.0892
247.500		-.0182	-.0610	-.0785	-.0819	-.0734	-.0762	-.0807	-.0824	-.0779	-.0605	-.0655
270.000	.1322	.0015	-.0582	-.0830	9.9990	-.0807	-.0790	-.0824	-.0779	-.0694	-.0734	-.0903
292.500		.0663	-.0255	-.0649	-.0559	-.0723	-.0830	-.0830	-.0790	-.0644	-.0847	-.0954
315.000	.4403	.2038	.0770	-.0114	-.0328	-.0903	-.0841	-.0847	-.0790	-.0322	-.0559	-.0948
326.000									-.0588	.0499	-.0683	-.0982
346.000		.5620	.3953	.2043	.1879	.2392	.1947	.2150	.3508	.3575	.7348	-.0723
360.000	.9733	.6509	.3870	.1942	.1875	.1120	.1903	.1841	.2168	.3842	.7547	-.0424

MACH (2) = 4.960 ALPHA (1) = 24.510 BETA = .00000 Q(PSI) = 3.0700 PO = 90.029 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.0014	.6474	.3828	.1989	.1938	.1661	.1951	.1913	.2631	.4987	.8591	.0401
14.000		.7570	.4559	.2392	.2417	.2909	.1951	.2127	.2934	.5277	.7406	.1422
24.000									.3992	.5063	.6323	.0200
45.000	1.2962	.8792	.5592	.3060	.3135	.2972	.3161	.2921	.3614	.2820	.6197	.0565
67.500		.8288	.5202	.2808	.2505	.2493	.2417	.2531	.2896	.2594	.3765	.0275
90.000	.9888	.6386	.3929	.1976	9.9990	.1535	.1548	.1535	.1712	.1687	.2291	.0023
112.500		.4118	.2354	.1044	.1107	.0742	.0679	.0653	.0729	.0718	.1069	.0149
135.000	.4294	.2240	.1119	.0414	.0376	.0326	.0263	.0187	9.9990	.0212	.0112	-.0152
157.500		.0981	.0452	.0162	.0162	.0175	.0112	.0036	.0590	.0112	-.0064	-.0164
180.000	.1208	.0414	.0225	.0074	.0099	.0174	.0074	.0011	.0149	.0023	-.0076	-.0202
202.500		.0238	.0099	.0036	.0086	.0124	.0023	-.0026	.0074	.0049	-.0152	-.0202

MSFC 588 (TA-2F) MCR-200 EXTERNAL TANK, T1 (R1A048)

MACH (2) = 4.960 ALPHA (1) = 24.510

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8800	.8920	.9230	.9540
THETA												
225.000	.0905	.0225	.0112	.0011	.0061	.0124	.0023	-.0076	.0049	-.0001	-.0101	-.0227
247.500		.0149	.0049	-.0013	.0011	.0061	-.0039	-.0102	-.0051	-.0051	.0099	.0112
270.000	.1409	.0326	.0086	-.0026	9.9990	.0023	-.0064	-.0101	-.0051	-.0127	-.0089	-.0026
292.500		.0918	.0250	-.0026	.0200	.0061	-.0051	-.0102	-.0026	-.0102	-.0064	-.0064
315.000	.4320	.2052	.0868	.0263	.0225	-.0039	-.0064	-.0127	-.0051	.0149	.0074	-.0089
326.000									.0187	.1170	-.0001	-.0076
346.000		.8943	.3789	.2013	.1212	.1321	.1950	.2064	.3298	.3663	.8654	.0023
360.000	1.0014	.6474	.3828	.1989	.1938	.1661	.1951	.1913	.2631	.4987	.8591	.0401

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A050) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 225.000

MACH (1) = 3.480 ALPHA (1) = 28.720 BETA = .00000 Q(PSI) = 6.8630 PO = 60.025 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.0741	.7365	.4648	.2540	.2472	.1830	.2664	.2794	.3064	.5623	.9338	-.0362
14.000		.8595	.5451	.3124	.3102	.2713	.2600	.3107	.3468	.5023	.7579	.0714
24.000									.4479	.5725	.6683	-.0159
45.000	1.3994	1.0009	.6627	.4011	.3746	.4208	.3797	3741	.2940	.3447	.7485	-.0103
67.500		.9372	.6232	.3622	.3369	.3335	.3025	.3171	.3346	.3115	.4428	-.0148
90.000	1.0335	.7004	.4485	.2410	9.9990	.1858	.1976	.1824	.1959	.1971	.2600	-.0509
112.500		.4248	.2422	.1012	.0736	.0578	.0550	.0499	.0545	.0556	.1221	-.0559
135.000	.3936	.2048	.0826	-.0030	-.0261	-.0424	-.0402	-.0424	9.9990	-.0441	-.0345	-.0652
157.500		.0561	-.0159	-.0587	-.0700	-.0745	-.0661	-.0621	-.0413	-.0565	-.0604	-.0852
180.000	.0623	-.0216	-.0605	-.0779	-.0807	-.0802	-.0655	-.0633	-.0610	-.0616	-.0655	-.0914
202.500		-.0351	-.0672	-.0796	-.0807	-.0807	-.0717	-.0723	-.0700	-.0683	-.0711	-.0903
225.000	.0494	-.0255	-.0627	-.0768	-.0711	-.0773	-.0762	-.0824	-.0807	-.0779	-.0768	-.0914
247.500		-.0322	-.0672	-.0824	-.0841	-.0869	-.0852	-.0869	-.0824	-.0779	-.0621	-.0610
270.000	.0855	-.0244	-.0683	-.0836	9.9990	-.0869	-.0858	-.0852	-.0847	-.0852	-.0686	-.0875
292.500		.0443	-.0351	-.0678	-.0418	-.0655	-.0869	-.0869	-.0886	-.0852	-.0931	-.0920
315.000	.4389	.2095	.0804	-.0012	-.0396	-.0897	-.0847	-.0859	-.0768	-.0300	-.0396	-.0971
326.000									-.0496	.0713	-.0570	-.0976
346.000		.6550	.4798	.2719	.2522	.3378	.2950	.3062	.4843	.4786	.8950	-.0610
360.000	1.0741	.7365	.4648	.2540	.2472	.1830	.2664	.2794	.3064	.5623	.9338	-.0362

MACH (2) = 4.960 ALPHA (1) = 28.540 BETA = .00000 Q(PSI) = 3.0700 PO = 90.032 P = .17600

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	1.0947	.7297	.4562	.2520	.2444	.2104	.2608	.2633	.3679	.5860	1.1224	.0515
14.000		.8467	.5304	.2960	.3061	.3842	.2658	.2910	.3817	.6249	.8326	.1926
24.000									.5340	.6398	.7732	.0389
45.000	1.4084	.9825	.6499	.3879	.3929	.4105	.4231	.4017	.4471	.3740	.7480	.0817
67.500		.9095	.6159	.3576	.3236	.3450	.3287	.3463	.3740	.3337	.4685	.0414
90.000	1.0200	.6854	.4564	.2430	9.9990	.2099	.2099	.2061	.2262	.2237	.2921	.0099
112.500		.4192	.2542	.1182	.1258	.0968	.0855	.0905	.0955	.0918	.1435	.0212
135.000	.3928	.2127	.1157	.0477	.0439	.0401	.0351	.0275	9.9990	.0275	.0200	-.0101
157.500		.0855	.0464	.0200	.0225	.0212	.0149	.0074	.0666	.0124	-.0102	-.0177
180.000	.0867	.0313	.0263	.0111	.0124	.0200	.0111	.0043	.0162	.0049	-.0152	-.0190
202.500		.0212	.0099	.0049	.0099	.0099	.0049	-.0026	.0061	.0023	-.0127	-.0227

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A050)

MACH (2) = 4.960 ALPHA (1) = 28.540

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.0828	.0200	.0099	.0023	.0074	.0137	.0023	-.0051	.0086	-.0001	-.0089	-.0227
247.500		.0099	.0036	-.0039	-.0001	-.0026	-.0051	-.0089	-.0013	-.0064	.0162	.0200
270.000	.1145	.0225	.0036	-.0001	9.9990	.0086	-.0039	-.0089	-.0013	-.0064	-.0026	-.0026
292.500		.0679	.0175	-.0026	.0162	.0036	-.0039	-.0114	-.0051	-.0101	-.0089	-.0013
315.000	.4030	.2027	.0905	.0263	.0149	.0011	-.0064	-.0114	.0124	.0288	.0162	-.0076
326.000									.0275	.1232	.0061	-.0089
346.000		.6749	.4532	.2542	.2416	.2051	.2744	.3021	.5112	.4998	1.1451	.0149
360.000	1.0947	.7297	.4562	.2520	.2444	.2104	.2608	.2633	.3679	.5960	1.1224	.0515

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A051) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.950 ALPHA (1) = -8.380 BETA = .00000 Q(PSI) = 10.272 PO = 28.006 P = 3.8420

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5424	.2807	.0470	-.1007	-.0833	-.0992	-.1093	-.0404	-.0796	.0647	.1278	-.2016
14.000		.2319	.0119	-.1206	-.1074	-.0772	-.0957	-.0403	-.0279	.1340	.2696	-.2291
24.000									-.0158	.1395	.3038	-.2331
45.000	.4769	.1505	-.0377	-.1537	-.1288	-.1548	-.0938	-.0403	-.0610	.0598	.1755	-.2440
67.500		.1302	-.0430	-.1617	-.1157	-.0332	-.0437	-.0189	-.0219	-.0460	.1366	-.2069
90.000	.4151	.1148	-.0554	-.1609	9.9990	-.0121	-.0279	-.0208	-.0046	-.0091	.0172	-.2045
112.500		.1234	-.0497	-.1593	-.1107	-.0418	-.0260	-.0301	-.0286	-.0230	.0330	-.2054
135.000	.4486	.1562	-.0316	-.1537	-.1186	-.0806	-.0471	-.0437	9.9990	-.0343	-.0316	-.1704
157.500		.1943	-.0038	-.1349	-.1131	-.1097	-.0878	-.0426	-.0539	-.0517	-.0507	-.1669
180.000	.5482	.2369	.0357	-.1082	-.0942	-.0989	-.0935	-.0792	-.0784	-.0743	-.0861	-.1617
202.500		.3048	.0768	-.0848	-.0671	-.0705	-.0875	-.0762	-.0750	-.0694	-.0762	-.1640
225.000	.6998	.3743	.1193	-.0520	-.0215	-.0207	-.0241	-.0505	-.0550	-.0366	-.0514	-.1819
247.500		.4202	.1449	-.0211	.0063	.0000	.0044	-.0064	-.0140	-.0143	.0296	-.2208
270.000	.8001	.4401	.1573	-.0113	9.9990	.0210	.0176	.0089	-.0057	.0059	.0326	-.2347
292.500		.4147	.1485	-.0135	-.0011	.0112	.0074	-.0041	.0153	-.0225	.1853	-.2388
315.000	.7271	.3929	.1331	-.0297	.0116	-.0004	-.0286	-.0384	-.0203	-.0098	.2583	-.2531
326.000									-.0128	.0567	.1732	-.2314
346.000		.3079	.0707	-.0806	-.0719	-.1533	-.1284	-.1141	.0165	.0507	.1186	-.2037
360.000	.5424	.2807	.0470	-.1007	-.0833	-.0992	-.1093	-.0404	-.0796	.0647	.1278	-.2016

MACH (2) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8640 PO = 60.031 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4916	.2677	.0844	-.0136	-.0136	-.0503	-.0378	-.0378	-.0271	.0010	.0341	-.0655
14.000		.2210	.0597	-.0277	-.0299	-.0497	-.0389	-.0389	-.0243	.0337	.1068	-.0875
24.000									-.0210	.0414	.0905	-.0880
45.000	.3874	.1446	.0173	-.0475	-.0390	-.0627	-.0610	-.0475	-.0322	-.0041	.0494	-.0864
67.500		.1220	.0054	-.0531	-.0430	-.0300	-.0390	-.0289	-.0204	-.0193	.0263	-.0790
90.000	.3307	.1142	-.0004	-.0555	9.9990	-.0336	-.0190	-.0173	-.0150	-.0162	.0049	-.0779
112.500		.1232	.0060	-.0525	-.0317	-.0430	-.0362	-.0418	-.0289	-.0300	.0003	-.0796
135.000	.3819	.1475	.0167	-.0486	-.0469	-.0345	-.0379	-.0413	9.9990	-.0435	-.0430	-.0774
157.500		.1830	.0409	-.0362	-.0413	-.0452	-.0418	-.0401	-.0024	-.0435	-.0486	-.0751
180.000	.5161	.2292	.0731	-.0176	-.0272	-.0396	-.0430	-.0446	-.0430	-.0475	-.0514	-.0745
202.500		.2996	.1145	.0041	-.0065	-.0205	-.0233	-.0301	-.0267	-.0273	-.0311	-.0740

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A05I)

MACH (2) = 3.480 ALPHA (1) = -8.360

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6784	.3639	.1554	.0280	.0184	.0009	.0020	-.0035	-.0029	-.0029	-.0074	-.0728
247.500		.4077	.1823	.0454	.0358	.0189	.0206	.0183	.0189	.0161	.0375	-.0785
270.000	.7699	.4268	.1958	.0538	9.9990	.0296	.0307	.0279	.0279	.0262	.0392	-.0836
292.500		.4048	.1840	.0471	.0397	.0324	.0285	.0268	.0347	.0313	.0793	-.0824
315.000	.6956	.3660	.1575	.0296	.0307	.0206	.0195	.0262	.0093	.0093	.1497	-.0875
326.000									.0291	.0082	.1131	-.0926
346.000		.2860	.1113	.0037	-.0092	-.0255	-.0390	-.0469	-.0266	.0031	.0466	-.0880
360.000	.4916	.2677	.0844	-.0136	-.0136	-.0503	-.0378	-.0378	-.0271	.0010	.0341	-.0655

MACH (3) = 4.960 ALPHA (1) = -8.310 BETA = .00000 Q(PSI) = 3.0700 PO = 90.024 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4041	.2469	.1171	.0705	.0717	.0730	.0578	.0528	.0629	.0629	.0174	-.0051
14.000		.2039	.0855	.0578	.0489	.0590	.0452	.0464	.0477	.0502	.0641	-.0089
24.000									.0096	.0124	.0351	-.0127
45.000	.3652	.1485	.0704	.0452	.0452	.0540	.0351	.0490	.0376	.0376	.0124	-.0139
67.500		.1296	.0578	.0364	.0351	.0439	.0401	.0527	.0364	.0326	.0137	-.0114
90.000	.3135	.1208	.0527	.0288	9.9990	.0338	.0351	.0527	.0301	.0250	.0023	-.0101
112.500		.1271	.0515	.0250	.0704	.0313	.0288	.0565	.0275	.0250	.0061	.0313
135.000	.3602	.1434	.0565	.0237	.0250	.0237	.0225	.0578	9.9990	.0174	.0011	.0313
157.500		.1787	.0691	.0263	.0250	.0200	.0212	.0590	.1825	.0187	-.0013	.0023
180.000	.4887	.2190	.0880	.0288	.0225	.0250	.0162	.0175	.0313	.0074	-.0001	-.0013
202.500		.2745	.1183	.0376	.0288	.0225	.0187	.0212	.0212	.0137	.0036	-.0051
225.000	.6247	.3299	.1498	.0502	.0389	.0364	.0275	.0250	.0288	.0225	.0137	-.0076
247.500		.3702	.1737	.0603	.0477	.0427	.0339	.0263	.0364	.0313	.0439	.0049
270.000	.7003	.3841	.1813	.0653	9.9990	.0401	.0376	.0225	.0376	.0326	.0439	.0011
292.500		.3715	.1750	.0590	.0502	.0427	.0389	.0275	.0351	.0376	.0502	-.0051
315.000	.6321	.3350	.1548	.0490	.0414	.0401	.0351	.0313	.0351	.0389	.0464	-.0064
326.000									.0338	.0464	.0578	-.0101
346.000		.2556	.1170	.0313	.0275	.0149	.0124	.0288	.0112	.0124	.0175	-.0114
360.000	.4041	.2469	.1171	.0705	.0717	.0730	.0578	.0528	.0629	.0629	.0174	-.0051

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (RIA052) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = -4.350 BETA = .00000 Q(PSI) = 10.266 PO = 28.004 P = 3.8360

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5294	.2725	.0556	-.0989	-.0717	-.0789	-.0604	.0047	.0149	.1092	.2539	-.1942
14.000		.2501	.0413	-.1112	-.0822	-.0969	-.0566	-.0226	.0006	.1634	.3194	-.2163
24.000									.0104	.1664	.3003	-.2258
45.000	.5138	.2148	.0100	-.1242	-.0781	-.0676	-.0480	-.0189	-.0151	.0798	.1916	-.2263
67.500		.2104	.0021	-.1303	-.0900	-.0143	-.0712	-.0162	-.0230	-.0358	.1414	-.1912
90.000	.4847	.2038	-.0046	-.1297	9.9990	-.0272	-.0193	-.0272	-.0012	-.0106	.0413	-.1872
112.500		.2057	.0017	-.1283	-.0879	-.0423	-.0223	-.0276	-.0174	-.0095	.0458	-.2006
135.000	.5139	.2216	.0176	-.1241	-.0902	-.0593	-.0321	-.0280	9.9990	-.0185	-.0159	-.1591
157.500		.2273	.0296	-.1099	-.0843	-.0719	-.0474	-.0263	-.0260	-.0252	-.0294	-.1476
180.000	.5647	.2391	.0432	-.0961	-.0743	-.0494	-.0366	-.0230	-.0321	-.0283	-.0377	-.1446
202.500		.2789	.0617	-.0917	-.0777	-.0476	-.0510	-.0359	-.0283	-.0238	-.0380	-.1535
225.000	.6425	.3185	.0748	-.0694	-.0415	-.0204	-.0177	-.0287	-.0324	-.0174	-.0305	-.1658
247.500		.3325	.0790	-.0574	-.0344	-.0178	-.0065	-.0159	-.0235	-.0186	.0232	-.1991
270.000	.6875	.3320	.0869	-.0633	9.9990	-.0162	.0021	-.0283	-.0219	-.0106	.0213	-.2201
292.500		.3191	.0873	-.0649	-.0336	-.0121	-.0121	-.0321	-.0204	-.0287	.1693	-.2100
315.000	.6592	.3130	.0794	-.0671	-.0189	.0115	-.0592	-.0347	-.0430	.0168	.2149	-.2173
326.000									-.0113	.0492	.1783	-.1991
346.000		.3018	.0768	-.0750	-.0683	-.1734	-.0611	-.0423	.0734	.0907	.1641	-.2177
360.000	.5294	.2725	.0556	-.0989	-.0717	-.0789	-.0604	.0047	.0149	.1092	.2539	-.1942

MACH (2) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 6.8620 PO = 60.010 P = .80900

SECTION (1)ANK

DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5026	.2598	.0782	-.0153	-.0142	-.0356	-.0232	-.0243	-.0153	.0266	.1339	-.0706
14.000		.2340	.0676	-.0215	-.0169	-.0389	-.0282	-.0254	-.0164	.0366	.1407	-.0700
24.000									-.0114	.0387	.1283	-.0796
45.000	.4609	.1928	.0501	-.0305	-.0175	-.0085	-.0356	-.0288	-.0220	.0010	.0691	-.0807
67.500		.1825	.0421	-.0382	-.0277	-.0159	-.0204	-.0288	-.0008	-.0198	.0313	-.0728
90.000	.4283	.1773	.0370	-.0373	9.9990	-.0170	-.0120	-.0178	-.0114	-.0091	.0080	-.0728
112.500		.1824	.0404	-.0382	-.0182	-.0178	-.0153	-.0170	-.0142	-.0142	.0028	-.0894
135.000	.4626	.1998	.0521	-.0323	-.0283	-.0213	-.0159	-.0139	9.9990	-.0159	-.0204	-.0672
157.500		.2179	.0648	-.0255	-.0266	-.0210	-.0198	-.0159	.0325	-.0176	-.0221	-.0638
180.000	.5330	.2376	.0821	-.0153	-.0182	-.0187	-.0193	-.0148	-.0131	-.0170	-.0204	-.0827
202.500		.2737	.0984	-.0069	-.0114	-.0120	-.0142	-.0159	-.0131	-.0142	-.0159	-.0616

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A052)

MACH (2) = 3.480 ALPHA (1) = -4.330

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6046	.3036	.1165	.0037	-.0007	-.0018	-.0046	-.0136	-.0063	-.0058	-.0074	-.0627
247.500		.3194	.1255	.0099	.0054	.0009	.0015	-.0153	-.0012	-.0007	.0184	-.0661
270.000	.6424	.3261	.1311	.0133	9.9990	.0088	.0077	.0032	.0037	.0026	.0156	-.0734
292.500		.3115	.1260	.0094	.0122	.0156	.0116	.0026	.0071	-.0012	.0454	-.0751
315.000	.6159	.2974	.1131	.0026	.0111	.0122	.0065	-.0103	-.0097	-.0080	.1136	-.0773
326.000									.0111	-.0029	.0950	-.0813
346.000		.2923	.1074	.0009	-.0012	-.0182	-.0227	-.0272	-.0046	.0421	.0979	-.0756
360.000	.5026	.2598	.0782	-.0153	-.0142	-.0356	-.0232	-.0243	-.0153	.0286	.1339	-.0706

MACH (3) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4534	.2418	.1120	.0629	.0666	.0666	.0528	.1523	.0603	.0616	.0628	-.0039
14.000		.2178	.0943	.0527	.0502	.0464	.0439	.0628	.0464	.0540	.0716	-.0076
24.000									.0124	.0225	.0628	-.0114
45.000	.4383	.1901	.0830	.0427	.0452	.0427	.0338	.0401	.0376	.0389	.0326	-.0089
67.500		.1813	.0742	.0464	.0351	.0414	.0389	.0452	.0389	.0351	.0263	-.0076
90.000	.4105	.1724	.0666	.0288	9.9990	.0364	.0338	.0464	.0288	.0275	.0086	-.0013
112.500		.1775	.0653	.0250	.0691	.0338	.0298	.0490	.0288	.0275	.0112	.0351
135.000	.4383	.1913	.0679	.0250	.0238	.0275	.0225	.0313	9.9990	.0212	.0112	.0338
157.500		.2077	.0830	.0238	.0238	.0238	.0225	.0200	.1661	.0200	.0099	.0263
180.000	.4987	.2229	.0880	.0238	.0187	.0225	.0162	.0225	.0313	.0124	.0074	.0200
202.500		.2556	.1057	.0288	.0250	.0212	.0187	.0263	.0212	.0175	.0061	.0137
225.000	.5592	.2745	.1145	.0301	.0238	.0225	.0200	.0263	.0200	.0124	.0099	.0112
247.500		.2909	.1233	.0326	.0275	.0275	.0212	.0301	.0200	.0162	.0250	.0124
270.000	.5907	.2972	.1309	.0351	9.9990	.0238	.0225	.0313	.0200	.0175	.0275	.0023
292.500		.2883	.1208	.0301	.0288	.0301	.0225	.0301	.0175	.0212	.0275	-.0013
315.000	.5680	.2720	.1094	.0263	.0250	.0263	.0212	.0313	.0124	.0175	.0351	-.0013
326.000									.0137	.0162	.0401	-.0089
346.000		.2669	.1157	.0250	.0225	.0263	.0086	.0338	.0162	.0200	.0353	-.0076
360.000	.4534	.2418	.1120	.0629	.0666	.0666	.0528	.1523	.0603	.0616	.0628	-.0039

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A053) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 10.264 PO = 28.008 P = 3.8330

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5192	.2590	.0451	-.0976	-.0611	-.0581	-.0460	.0243	-.0125	.1814	.3810	-.1876
14.000		.2620	.0503	-.0957	-.0490	-.1646	-.0445	-.0151	.0067	.1769	.2636	-.2310
24.000									.0209	.1686	.2516	-.2424
45.000	.5913	.2453	.0451	-.0991	-.0696	-.0179	-.0677	-.0084	-.0586	.0251	.2662	-.2416
67.500		.2614	.0643	-.0909	-.0589	.0044	-.0589	-.0204	-.0219	-.0287	.1487	-.1910
90.000	.5946	.2519	.0635	-.0965	9.9990	-.0347	-.0106	-.0355	-.0132	-.0151	.0236	-.1881
112.500		.2622	.0643	-.0913	-.0604	-.0438	-.0253	-.0261	-.0208	-.0174	.0375	-.1936
135.000	.5892	.2687	.0587	-.0936	-.0721	-.0476	-.0291	-.0208	9.9990	-.0227	-.0170	-.1575
157.500		.2565	.0503	-.0914	-.0704	-.0557	-.0320	-.0150	-.0222	-.0177	-.0162	-.1459
180.000	.5718	.2379	.0398	-.1017	-.0723	-.0354	-.0223	-.0113	-.0185	-.0128	-.0242	-.1454
202.500		.2564	.0327	-.1081	-.0708	-.0422	-.0358	-.0245	-.0241	-.0181	-.0234	-.1439
225.000	.5784	.2586	.0300	-.0970	-.0646	-.0291	-.0178	-.0201	-.0250	-.0144	-.0249	-.1538
247.500		.2454	.0229	-.1020	-.0670	-.0305	-.0075	-.0196	-.0211	-.0222	.0281	-.1981
270.000	.5905	.2403	.0345	-.1018	9.9990	-.0358	-.0049	-.0317	-.0147	-.0185	.0481	-.1978
292.500		.2305	.0394	-.1055	-.0660	-.0012	-.0365	-.0219	-.0355	-.0242	.1563	-.2032
315.000	.5873	.2435	.0428	-.1042	-.0687	-.0189	-.0649	-.0193	-.0495	.0168	.2168	-.2250
326.000									.0149	.0179	.2157	-.2106
346.000		.2765	.0553	-.0845	-.0705	-.1399	-.0396	-.0129	.0364	.1348	.2836	-.2024
360.000	.5192	.2590	.0451	-.0976	-.0611	-.0581	-.0460	.0243	-.0125	.1814	.3810	-.1876

MACH (2) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8620 PO = 60.010 P = .80900

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4989	.2481	.0777	-.0186	.0038	-.0344	-.0260	-.0181	-.0085	.0501	.1638	-.0678
14.000		.2461	.0793	-.0176	.0043	-.0260	-.0260	-.0193	-.0086	.0454	.1542	-.0689
24.000									-.0024	.0330	.1503	-.0835
45.000	.5364	.2410	.0748	-.0193	-.0046	.0082	-.0193	-.0193	-.0142	-.0035	.1007	-.0773
67.500		.2489	.0821	-.0176	-.0142	-.0035	-.0120	-.0131	-.0035	-.0120	.0392	-.0717
90.000	.5381	.2484	.0838	-.0165	9.9990	-.0091	-.0080	-.0120	-.0086	-.0080	.0088	-.0717
112.500		.2492	.0834	-.0164	-.0023	-.0107	-.0119	-.0119	-.0068	-.0085	.0111	-.0644
135.000	.5415	.2534	.0849	-.0170	-.0159	-.0120	-.0120	-.0114	9.9990	-.0063	-.0120	-.0616
157.500		.2472	.0843	-.0114	-.0165	-.0120	-.0136	-.0114	.0359	-.0069	-.0153	-.0604
180.000	.5324	.2389	.0805	-.0175	-.0198	-.0119	-.0142	-.0113	-.0051	-.0085	-.0153	-.0582
202.500		.2438	.0804	-.0187	-.0198	-.0120	-.0142	-.0103	-.0058	-.0074	-.0159	-.0593

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A053)

MACH (2) = 3.480 ALPHA (1) = -.280

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5240	.2438	.0804	-.0187	-.0198	-.0159	-.0142	-.0103	-.0063	-.0074	-.0136	-.0632
247.500		.2410	.0770	-.0193	-.0182	-.0120	-.0136	-.0108	-.0058	-.0074	.0077	-.0666
270.000	.5262	.2399	.0725	-.0193	9.9990	-.0114	-.0103	-.0086	-.0074	-.0063	.0049	-.0694
292.500		.2337	.0736	-.0215	-.0120	-.0097	-.0058	-.0091	-.0052	-.0125	.0235	-.0694
315.000	.5426	.2365	.0742	-.0227	-.0108	.0003	-.0170	-.0086	-.0120	-.0170	.0640	-.0689
326.000									.0139	.0060	.0488	-.0711
346.000		.2692	.0945	-.0120	.0026	-.0345	-.0227	-.0080	.0043	.0640	.1210	-.0751
360.000	.4969	.2481	.0777	-.0186	.0038	-.0344	-.0260	-.0181	-.0085	.0501	.1638	-.0678

MACH (3) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0710 PO = 90.049 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4558	.2289	.1068	.0589	.0728	.0728	.0476	.1546	.0627	.0665	.0628	-.0026
14.000		.2289	.0955	.0577	.0073	.0564	.0539	.0413	.0476	.0564	.1157	-.0102
24.000									.0099	.0225	.0817	-.0152
45.000	.5137	.2379	.1031	.0452	.0477	.0540	.0338	.0414	.0376	.0439	.0502	-.0102
67.500		.2429	.0993	.0351	.0351	.0489	.0363	.0439	.0376	.0351	.0212	-.0039
90.000	.5202	.2442	.1018	.0351	9.9990	.0389	.0326	.0464	.0326	.0300	.0111	-.0064
112.500		.2428	.0955	.0288	.0665	.0351	.0250	.0275	.0288	.0275	.0099	-.0064
135.000	.5200	.2442	.0943	.0275	.0288	.0288	.0212	.0200	9.9990	.0212	.0036	-.0026
157.500		.2379	.4458	.0162	.0326	-.0618	.0200	.0200	.1397	.0200	-.0001	-.0013
180.000	.5049	.2291	.0943	.0238	.0200	.0263	.0162	.0250	.0326	.0175	.0023	.0036
202.500		.2290	.0867	.0187	.0162	.0187	.0124	.0250	.0162	.0162	.0023	-.0001
225.000	.4861	.2265	.0842	.0162	.0137	.0200	.0124	.0250	.0187	.0124	-.0001	-.0026
247.500		.2253	.0890	.0149	.0124	.0174	.0086	.0288	.0212	.0124	.0036	.0111
270.000	.4822	.2253	.0817	.0162	9.9990	.0212	.0086	.0300	.0137	.0111	.0074	.0036
292.500		.2152	.0779	.0074	.0137	.0212	.0074	.0111	.0111	.0111	.0124	.0023
315.000	.5036	.2152	.0741	.0074	.0137	.0162	.0049	.0049	.0061	.0074	.0263	.0036
326.000									.0086	.0124	.0288	-.0001
346.000		.2429	.0993	.0149	.0225	.0111	.0049	.0049	.0174	.0275	.0365	-.0064
360.000	.4558	.2289	.1068	.0589	.0728	.0728	.0476	.1546	.0627	.0665	.0628	-.0026

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A054) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.980 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 10.251 PO = 28.005 P = 3.8190

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5157	.2503	.0349	-.0987	-.0588	-.0878	-.0599	-.0109	-.0038	.1614	.3559	-.1791
14.000		.2775	.0519	-.0869	-.0586	-.1469	-.0639	-.0231	-.0020	.1345	.2480	-.2057
24.000									.0077	.1192	.2134	-.2465
45.000	.6587	.2995	.0754	-.0851	-.0054	.0149	-.0493	-.0224	-.0546	.0451	.2278	-.2502
67.500		.3351	.1057	-.0505	-.0264	-.0038	-.0358	-.0332	.0021	-.0369	.1612	-.2056
90.000	.7037	.3390	.1085	-.0427	9.9990	-.0193	-.0016	-.0261	-.0140	-.0057	.0010	-.2255
112.500		.3354	.1048	-.0459	-.0323	-.0323	-.0308	-.0183	-.0240	-.0213	.0300	-.1946
135.000	.6553	.3277	.0884	-.0705	-.0471	-.0566	-.0453	-.0355	9.9990	-.0449	-.0311	-.1743
157.500		.2880	.0663	-.0849	-.0607	-.0500	-.0471	-.0316	-.0354	-.0403	-.0352	-.1631
180.000	.5691	.2407	.0406	-.1051	-.0726	-.0511	-.0398	-.0296	-.0337	-.0356	-.0392	-.1500
202.500		.2206	.0190	-.1251	-.1040	-.0607	-.0516	-.0385	-.0366	-.0332	-.0348	-.1475
225.000	.5025	.1967	-.0118	-.1227	-.0925	-.0484	-.0257	-.0318	-.0295	-.0231	-.0272	-.1524
247.500		.1637	-.0181	-.1383	-.0969	-.0362	-.0068	-.0226	-.0162	-.0159	.0270	-.1908
270.000	.4875	.1628	-.0191	-.1323	9.9990	-.0305	-.0093	-.0191	-.0013	-.0104	.0353	-.1921
292.500		.1541	-.0167	-.1401	-.0891	-.0035	-.0503	-.0167	-.0280	-.0284	.1376	-.2069
315.000	.5232	.1767	.0066	-.1407	-.0996	-.0596	-.0517	-.0219	-.0562	-.0204	.2327	-.2020
326.000									-.0163	.0307	.2072	-.2131
346.000		.2501	.0372	-.0953	-.0583	-.1058	-.0428	-.0273	.0258	.1606	.2351	-.1999
360.000	.5157	.2503	.0349	-.0987	-.0588	-.0878	-.0599	-.0109	-.0038	.1614	.3559	-.1791

MACH (2) = 3.480 ALPHA (1) = 3.790 BETA = .00000 Q(PSI) = 6.8630 PO = 60.022 P = .81000

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4964	.2355	.0743	-.0192	.0027	-.0350	-.0271	-.0226	-.0068	.0528	.1773	-.0717
14.000		.2575	.0844	-.0142	.0015	-.0085	-.0266	-.0238	-.0018	.0376	.1542	-.0723
24.000									.0139	.0313	.0966	-.0853
45.000	.6142	.2980	.1142	.0015	.0099	.0122	.0071	-.0080	.0049	-.0046	.1169	-.0802
67.500		.3258	.1332	.0109	.0064	.0087	.0070	.0036	.0115	.0042	.0471	-.0796
90.000	.6541	.3322	.1355	.0138	9.9990	.0093	.0037	.0009	.0026	.0037	.0150	-.0807
112.500		.3271	.1333	.0121	.0144	.0048	-.0002	.0014	.0009	-.0019	.0235	-.0678
135.000	.6212	.3134	.1245	.0049	.0004	-.0023	-.0063	.0027	9.9990	-.0068	-.0091	-.0627
157.500		.2764	.1045	-.0030	-.0103	-.0114	-.0159	-.0159	.0155	-.0154	-.0194	-.0610
180.000	.5271	.2376	.0804	-.0159	-.0210	-.0187	-.0232	-.0232	-.0176	-.0210	-.0250	-.0621
202.500		.2140	.0607	-.0283	-.0306	-.0221	-.0249	-.0215	-.0176	-.0193	-.0289	-.0655

MSFC 568 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A054)

MACH (2) = 3.480 ALPHA (1) = 3.790

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4429	.1902	.0488	-.0357	-.0362	-.0221	-.0216	-.0199	-.0171	-.0204	-.0266	-.0683
247.500		.1762	.0381	-.0401	-.0351	-.0204	-.0210	-.0187	-.0148	-.0142	-.0001	-.0666
270.000	.4180	.1683	.0330	-.0430	9.9990	-.0176	-.0176	-.0176	-.0086	-.0063	.0026	-.0734
292.500		.1683	.0330	-.0435	-.0277	-.0159	-.0227	-.0187	-.0080	-.0210	.0200	-.0751
315.000	.4628	.1877	.0433	-.0401	-.0322	-.0130	-.0316	-.0169	-.0367	-.0141	.0995	-.0728
326.000									-.0104	-.0097	.0837	-.0717
346.000		.2426	.0789	-.0210	-.0024	-.0419	-.0199	-.0171	.0009	.0600	.1052	-.0779
360.000	.4964	.2355	.0743	-.0192	.0027	-.0350	-.0271	-.0226	-.0068	.0528	.1773	-.0717

MACH (3) = 4.960 ALPHA (1) = 3.750 BETA = .00000 Q(PSI) = 3.0700 PO = 90.031 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4797	.2165	.1006	.0578	.0653	.0678	.0477	.1510	.0578	.0615	.0464	-.0051
14.000		.2417	.0994	.0515	.0452	.0565	.0364	.0553	.0452	.0502	.0943	-.0114
24.000									.0099	.0112	.0401	-.0139
45.000	.5907	.2909	.1283	.0540	.0540	.0578	.0414	.0628	.0464	.0464	.0414	-.0127
67.500		.3173	.1422	.0490	.0464	.0502	.0427	.0326	.0452	.0414	.0338	-.0114
90.000	.6348	.3260	.1484	.0515	9.9990	.0439	.0389	.0313	.0389	.0401	.0250	-.0051
112.500		.3198	.1472	.0477	.0792	.0401	.0326	.0338	.0351	.0313	.0263	.0111
135.000	.5993	.3022	.1321	.0364	.0399	.0338	.0250	.0238	9.9990	.0250	.0074	.0124
157.500		.2657	.1094	.0301	.0263	.0263	.0187	.0137	.1233	.0187	-.0013	.0112
180.000	.4948	.2279	.0955	.0237	.0212	.0212	.0124	.0099	.0288	.0099	-.0001	.0137
202.500		.1989	.0754	.0149	.0137	.0175	.0074	.0061	.0200	.0149	.0011	.0137
225.000	.4080	.1775	.0653	.0099	.0099	.0200	.0086	.0061	.0200	.0162	.0036	.0162
247.500		.1598	.0489	.0049	.0036	.0149	.0049	.0036	.0149	.0099	.0049	.0149
270.000	.3828	.1523	.0490	.0049	9.9990	.0149	.0049	.0061	.0124	.0086	.0061	.0049
292.500		.1523	.0452	-.0026	.0074	.0124	.0023	.0061	.0112	.0061	.0074	.0049
315.000	.4192	.1712	.0553	.0011	.0074	.0099	.0023	.0099	.0036	.0112	.0149	.0011
326.000									-.0026	.0023	.0099	-.0064
346.000		.2266	.0792	.0086	.0162	.0086	.0023	.0112	.0149	.0225	.0477	-.0076
360.000	.4797	.2165	.1006	.0578	.0653	.0678	.0477	.1510	.0578	.0615	.0464	-.0051

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A055) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = 7.860 BETA = .00000 Q(PSI) = 10.255 PO = 28.002 P = 3.8240

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4918	.2285	.0349	-.1050	-.0801	-.1782	-.0797	-.0280	-.0167	.1666	.3266	-.1959
14.000		.2719	.0534	-.0927	-.0460	-.1029	-.1086	-.0573	-.0257	.0756	.1688	-.2173
24.000									.0096	.0689	.1444	-.2285
45.000	.7168	.3599	.1141	-.0464	.0228	.0213	-.0136	-.0200	-.0521	.0232	.2666	-.2585
67.500		.4268	.1673	-.0151	.0138	.0006	-.0050	-.0023	.0360	-.0201	.1621	-.2216
90.000	.8081	.4366	.1849	-.0064	9.9990	.0044	.0168	.0029	.0040	.0157	.0115	-.2572
112.500		.4249	.1762	-.0144	.0059	-.0069	-.0193	-.0113	-.0121	-.0132	.0470	-.2212
135.000	.7311	.3864	.1439	-.0434	-.0148	-.0514	-.0480	-.0397	9.9990	-.0600	-.0585	-.1932
157.500		.3042	.0869	-.0763	-.0533	-.0819	-.0831	-.0763	-.0846	-.0921	-.0858	-.1749
180.000	.5507	.2274	.0270	-.1129	-.0948	-.0971	-.1058	-.1027	-.0884	-.0929	-.0944	-.1703
202.500		.1786	-.0250	-.1381	-.1257	-.1147	-.1034	-.0740	-.0646	-.0619	-.0650	-.1729
225.000	.4159	.1266	-.0385	-.1543	-.1230	-.0793	-.0427	-.0502	-.0442	-.0416	-.0438	-.1750
247.500		.0971	-.0574	-.1649	-.1192	-.0453	-.0151	-.0287	-.0314	-.0314	.0157	-.2069
270.000	.3755	.1016	-.0690	-.1610	9.9990	-.0197	-.0223	-.0189	-.0091	-.0016	.0006	-.2166
292.500		.1092	-.0631	-.1642	-.1016	-.0212	-.0374	-.0201	-.0039	-.0571	.1304	-.2115
315.000	.4311	.1297	-.0409	-.1644	-.1270	-.1149	-.0817	-.0854	-.0809	.0315	.1572	-.2257
326.000									-.0745	.0670	.1466	-.2314
346.000		.2065	.0440	-.1030	-.0759	-.0676	-.0574	-.0314	.0006	.1706	.2389	-.2120
360.000	.4918	.2285	.0349	-.1050	-.0801	-.1782	-.0797	-.0280	-.0167	.1666	.3266	-.1959

MACH (2) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(PSI) = 6.8660 PO = 60.046 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4803	.2323	.0701	-.0182	.0036	-.0256	-.0216	-.0272	-.0075	.0425	.1000	-.0745
14.000		.2753	.0983	-.0069	.0026	.0104	-.0233	-.0278	.0076	.0364	.1018	-.0824
24.000									.0037	.0257	.0707	-.0864
45.000	.6869	.3541	.1507	.0251	.0273	.0313	.0234	.0144	.0082	.0059	.1778	-.0892
67.500		.4088	.1874	.0465	.0352	.0347	.0273	.0240	.0330	.0307	.0820	-.0802
90.000	.7767	.4263	.2003	.0538	9.9990	.0369	.0330	.0234	.0257	.0273	.0386	-.0802
112.500		.4122	.1913	.0488	.0442	.0307	.0234	.0178	.0189	.0178	.0476	-.0774
135.000	.6995	.3744	.1682	.0313	.0206	.0104	.0059	.0003	9.9990	-.0030	-.0041	-.0745
157.500		.3029	.1254	.0082	-.0013	-.0103	-.0171	-.0233	.0037	-.0266	-.0289	-.0734
180.000	.5113	.2302	.0803	-.0165	-.0244	-.0300	-.0390	-.0441	-.0424	-.0452	-.0514	-.0712
202.500		.1845	.0459	-.0362	-.0396	-.0402	-.0402	-.0407	-.0402	-.0419	-.0464	-.0717

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A055)

MACH (2) = 3.480 ALPHA (1) = 7.800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.3660	.1434	.0195	-.0458	-.0492	-.0374	-.0379	-.0407	-.0424	-.0441	-.0441	-.0762
247.500		.1186	.0054	-.0559	-.0469	-.0334	-.0379	-.0390	-.0396	-.0362	-.0092	-.0768
270.000	.3222	.1096	.0003	-.0582	9.9990	-.0255	-.0154	-.0143	-.0120	-.0120	.0032	-.0734
292.500		.1125	-.0004	-.0606	-.0386	-.0218	-.0308	-.0251	-.0184	-.0150	.0082	-.0745
315.000	.3846	.1406	.0127	-.0559	-.0424	-.0396	-.0571	-.0610	-.0565	-.0306	.0127	-.0734
326.000									-.0430	-.0193	.0409	-.0723
346.000		.2043	.0679	-.0216	-.0030	-.0492	-.0199	-.0283	-.0131	.0482	.1350	-.0807
360.000	.4803	.2323	.0701	-.0182	.0036	-.0256	-.0216	-.0272	-.0075	.0425	.1000	-.0745

MACH (3) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(PSI) = 3.0700 PO = 90.019 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4609	.2180	.1008	.0554	.0642	.0705	.0503	.0491	.0566	.0604	.0905	-.0064
14.000		.2595	.1108	.0515	.0452	.0578	.0427	.0314	.0440	.0452	.0767	-.0064
24.000									.0074	.0074	.0603	-.0139
45.000	.6600	.3388	.1611	.0603	.0553	.0603	.0477	.0402	.0528	.0566	.0641	-.0164
67.500		.3914	.1862	.0691	.0602	.0640	.0539	.0451	.0552	.0590	.0616	-.0101
90.000	.7457	.4131	.2039	.0742	9.9990	.0590	.0565	.0477	.0515	.0515	.0490	-.0114
112.500		.3979	.1901	.0679	.0905	.0540	.0477	.0477	.0439	.0414	.0515	.0023
135.000	.6739	.3589	.1649	.0540	.0439	.0439	.0338	.0477	9.9990	.0288	.0187	.0011
157.500		.2959	.1321	.0389	.0326	.0326	.0238	.0175	.1006	.0200	.0023	-.0013
180.000	.4836	.2253	.0956	.0238	.0187	.0175	.0124	.0112	.0238	.0099	.0023	-.0013
202.500		.1724	.0616	.0099	.0112	.0124	.0061	.0175	.0137	.0099	.0011	-.0001
225.000	.3375	.1334	.0389	-.0026	-.0013	.0149	.0074	.0137	.0112	.0061	.0023	-.0051
247.500		.1107	.0338	-.0001	.0023	.0099	.0049	.0175	.0086	.0049	-.0013	.0099
270.000	.2921	.1031	.0225	-.0013	9.9990	.0086	.0061	.0162	.0049	.0036	.0036	.0049
292.500		.1057	.0301	-.0076	.0061	.0074	.0061	.0200	.0049	.0049	.0061	-.0026
315.000	.3463	.1334	.0326	-.0051	-.0001	.0023	-.0026	.0200	-.0026	.0011	-.0001	-.0064
326.000									-.0089	-.0064	-.0039	-.0039
346.000		.1964	.0742	.0086	.0175	.0061	.0099	.0149	.0137	.0225	.0338	-.0101
360.000	.4609	.2180	.1008	.0554	.0642	.0705	.0503	.0491	.0566	.0604	.0905	-.0064

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A056) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.970 ALPHA (1) = 12.570 BETA = .00000 Q(PSI) = 10.213 PO = 28.006 P = 3.7770

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4629	.2307	.0323	-.1114	-.0772	-.1822	-.0945	-.0565	-.0079	.0744	.1773	-.2172
14.000		.2855	.0701	-.0838	-.0615	-.0482	-.1217	-.0751	-.0331	-.0089	.1179	-.2129
24.000									-.0305	-.0203	.0543	-.2317
45.000	.7622	.4035	.1728	-.0036	.0360	.0323	.0425	.0190	-.0283	.0235	.2470	-.2487
67.500		.4938	.2407	.0531	.0595	.0421	.0175	.0402	.0614	.0058	.1764	-.2627
90.000	.9185	.5237	.2590	.0782	9.9990	.0618	.0603	.0455	.0304	.0410	.0447	-.2438
112.500		.5028	.2316	.0599	.0436	.0277	.0107	.0198	.0160	.0069	.0614	-.2547
135.000	.7901	.4345	.1781	.0080	-.0044	-.0419	-.0381	-.0395	9.9990	-.0620	-.0537	-.2258
157.500		.3115	.1039	-.0567	-.0620	-.0987	-.0930	-.0999	-.1154	-.1234	-.1243	-.2123
180.000	.5076	.2088	.0217	-.1150	-.1203	-.1465	-.1586	-.1806	-.1764	-.1756	-.1741	-.2138
202.500		.1406	-.0438	-.1566	-.1540	-.1907	-.1839	-.1286	-.1032	-.0975	-.1045	-.2126
225.000	.3350	.0850	-.0738	-.1762	-.1535	-.1201	-.0890	-.1087	-.1129	-.1079	-.1184	-.2135
247.500		.0629	-.0968	-.1650	-.1339	-.0532	-.0456	-.0636	-.0847	-.0896	-.0604	-.2350
270.000	.2896	.0622	-.1034	-.1815	9.9990	.0057	-.0423	-.0195	-.0427	-.0404	-.0150	-.2379
292.500		.0645	-.0999	-.1893	-.1127	-.0385	-.0445	-.0370	-.0517	-.0445	.0801	-.2575
315.000	.3640	.0929	-.0810	-.1830	-.1516	-.2134	-.1925	-.1425	-.0943	-.0059	.0997	-.1771
326.000									-.0815	.0156	.1491	-.1758
346.000		.1947	.0485	-.1112	-.0737	-.0430	-.0589	-.0695	.0008	.1413	.2193	-.2411
360.000	.4629	.2307	.0323	-.1114	-.0772	-.1822	-.0945	-.0565	-.0079	.0744	.1773	-.2172

MACH (2) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(PSI) = 6.8620 PO = 60.012 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4798	.2330	.0716	-.0152	-.0028	-.0186	-.0197	-.0242	-.0045	.0377	.0837	-.0740
14.000		.2908	.1075	.0004	.0015	.0275	-.0249	-.0305	.0010	.0252	.0911	-.0886
24.000									-.0030	.0133	.0804	-.0897
45.000	.7545	.4104	.1899	.0523	.0489	.0495	.0466	.0410	.0325	.0280	.2134	-.0875
67.500		.4966	.2545	.0880	.0733	.1692	1.6451	.0558	.0699	.0677	.1243	-.0779
90.000	.8960	.5251	.2732	.1024	9.9990	.0725	.0697	.0573	.0595	.0612	.0714	-.0745
112.500		.5023	.2572	.0916	.0797	.0589	.0527	.0442	.0476	.0448	.0809	-.0824
135.000	.7686	.4366	.2100	.0601	.0443	.0274	.0223	.0156	9.9990	.0105	.0122	-.0869
157.500		.3290	.1463	.0229	.0094	-.0063	-.0165	-.0215	-.0074	-.0255	-.0266	-.0824
180.000	.4936	.2252	.0821	-.0142	-.0238	-.0390	-.0492	-.0565	-.0559	-.0604	-.0632	-.0807
202.500		.1559	.0308	-.0418	-.0497	-.0582	-.0616	-.0627	-.0599	-.0610	-.0650	-.0807

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A056)

MACH (2) = 3.480 ALPHA (1) = 12.520

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.2985	.1034	.0009	-.0582	-.0576	-.0576	-.0582	-.0621	-.0588	-.0593	-.0616	-.0830
247.500		.0747	-.0182	-.0655	-.0559	-.0571	-.0689	-.0650	-.0633	-.0621	-.0464	-.0768
270.000	.2455	.0663	-.0204	-.0661	9.9990	-.0334	-.0052	-.0260	-.0266	-.0283	-.0159	-.0813
292.500		.0708	-.0232	-.0683	-.0446	-.0311	-.0396	-.0520	-.0503	-.0322	-.0159	-.0830
315.000	.3158	.1007	-.0063	-.0649	-.0469	-.0785	-.0773	-.0694	-.0469	-.0384	-.0046	-.0762
326.000									-.0424	-.0293	.0127	-.0768
346.000		.1937	.0742	-.0131	-.0041	-.0418	-.0159	-.0176	-.0125	.0443	.1182	-.0802
360.000	.4798	.2330	.0716	-.0152	-.0028	-.0186	-.0197	-.0242	-.0045	.0377	.0837	-.0740

MACH (3) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.025 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4622	.2266	.1132	.0704	.0779	.0880	.0603	.0590	.0679	.0666	.0691	-.0064
14.000		.2871	.1309	.0691	.0603	.0729	.0527	.0414	.0527	.0553	.1283	-.0127
24.000									.0175	.0182	.0905	-.0101
45.000	.7432	.4068	.1964	.0868	.0767	.0792	.0704	.0464	.0742	.0893	.1031	-.0152
67.500		.4912	.2543	.1057	.0893	.0893	.0779	.0653	.0842	.0880	.1094	-.0164
90.000	.8956	.5238	.2794	.1182	9.9990	.0892	.0855	.0729	.0829	.0792	.0981	-.0127
112.500		.5000	.2631	.1107	.1258	.0779	.0729	.0653	.0729	.0679	.0956	-.0114
135.000	.7621	.4332	.2203	.0842	.0754	.0565	.0527	.0452	9.9990	.0452	.0389	-.0177
157.500		.3274	.1586	.0565	.0477	.0351	.0288	.0225	.0842	.0238	.0099	-.0152
180.000	.4735	.2291	.0994	.0313	.0288	.0263	.0162	.0061	.0212	.0049	-.0064	-.0177
202.500		.1523	.0553	.0149	.0162	.0175	.0049	.0023	.0124	.0086	-.0089	-.0177
225.000	.2833	.1082	.0399	.0074	.0124	.0124	.0074	-.0001	.0099	.0023	-.0076	-.0202
247.500		.0779	.0200	.0036	.0036	.0099	.0011	-.0051	.0023	-.0013	-.0013	-.0013
270.000	.2291	.0729	.0225	.0036	9.9990	.0099	.0124	-.0013	.0061	-.0013	-.0001	-.0051
292.500		.0742	.0162	-.0051	.0137	.0086	.0011	-.0076	.0036	-.0039	.0036	-.0013
315.000	.2984	.1031	.0200	-.0039	.0074	.0023	-.0051	-.0101	-.0026	-.0026	-.0051	-.0051
326.000									-.0026	-.0076	-.0089	-.0101
346.000		.1926	.0817	.0175	.0212	.0112	.0175	.0162	.0225	.0263	.0302	-.0102
360.000	.4622	.2266	.1132	.0704	.0779	.0880	.0603	.0590	.0679	.0666	.0691	-.0064

MSFC 59B (TA-2F) MCR0200 EXTERNAL TANK, F1 (R1A057) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = 16.640 BETA = .00000 Q(PSI) = 10.220 PL = 27.998 P = 3.7880

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4618	.2189	.0289	-.1146	-.1025	-.1652	-.1089	-.0643	-.0541	-.0334	.0592	-.2281
14.000		.2927	.0735	-.0886	-.0844	-.0546	-.1301	-.1230	-.0678	-.0394	.0319	-.2343
24.000									-.0751	-.0572	.0114	-.2573
45.000	.8234	.4672	.2095	.0319	.0523	.0775	.0753	.0677	.0036	.0545	.3000	-.2562
67.500		.5988	.3129	.1120	.1178	.1003	.0602	.0931	.1248	.0598	.2298	-.2799
90.000	1.0307	.6424	.3471	.1365	9.9990	.1255	.1195	.0931	.0833	.0965	.1047	-.2194
112.500		.6035	.3137	.1081	.0964	.0791	.0587	.0609	.0628	.0538	.1260	-.2603
135.000	.8548	.5044	.2362	.0349	.0277	-.0171	-.0129	-.0213	9.9990	-.0417	-.0371	-.2589
157.500		.3375	.1229	-.0432	-.0557	-.1018	-.0999	-.1105	-.1237	-.1343	-.1320	-.2345
180.000	.4739	.1920	.0062	-.1244	-.1372	-.1840	-.1931	-.2037	-.1833	-.1814	-.1841	-.2361
202.500		.0953	-.0738	-.1811	-.1992	-.2305	-.1860	-.1570	-.1445	-.1430	-.1523	-.2351
225.000	.2528	.0338	-.1144	-.2043	-.1911	-.1937	-.1737	-.1926	-.2020	-.1937	-.1845	-.2527
247.500		.0017	-.1259	-.2011	-.1720	-.1437	-.1527	-.1909	-.1958	-.1932	-.1586	-.2421
270.000	.2151	.0038	-.1237	-.1943	9.9990	.0144	-.0588	-.0527	-.0804	-.0842	-.0928	-.2381
292.500		.0038	-.1299	-.2076	-.1287	-.0726	-.0950	-.1098	-.1143	-.1193	.0941	-.2212
315.000	.3071	.0448	-.1128	-.2009	-.2165	-.2788	-.1903	-.1143	-.0885	-.0136	.1299	-.1932
326.000									-.0766	.0030	.1409	-.2047
346.000		.1844	.0459	-.1039	-.0640	-.0572	-.0390	-.0944	-.0079	.0186	.1725	-.2482
360.000	.4616	.2189	.0289	-.1146	-.1025	-.1652	-.1089	-.0643	-.0541	-.0334	.0592	-.2281

MACH (2) = 3.480 ALPHA (1) = 16.640 BETA = .00000 Q(PSI) = 6.8630 PO = 60.020 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4812	.2393	.0793	-.0069	-.0041	-.0046	-.0114	-.0176	.0144	.0308	.0511	-.0785
14.000		.3047	.1227	.0105	.0082	.0161	-.0131	-.0339	.0071	.0189	.0916	-.0909
24.000									.0026	.0048	.0714	-.0914
45.000	.8212	.4727	.2365	.0849	.0725	.0922	.0934	.0826	.0781	.0652	.2579	-.0824
67.500		.5911	.3256	.1373	.1148	.1198	.1001	.0996	.1193	.1210	.1858	-.0734
90.000	1.0262	.6336	.3598	.1609	9.9990	.1231	.1220	.1085	.1113	.1135	.1204	-.0655
112.500		.6001	.3346	.1452	.1244	.1058	.0956	.0900	.0934	.0911	.1322	-.0785
135.000	.8408	.5014	.2630	.0956	.0742	.0545	.0494	.0426	9.9990	.0375	.0386	-.0864
157.500		.3526	.1661	.0387	.0189	.0015	-.0074	-.0125	.0037	-.0165	-.0182	-.0835
180.000	.4682	.2185	.0798	-.0131	-.0283	-.0452	-.0525	-.0582	-.0570	-.0610	-.0666	-.0824
202.500		.1272	.0150	-.0492	-.0615	-.0700	-.0728	-.0711	-.0689	-.0594	-.0740	-.0824

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A057)

MACH (2) = 3.480 ALPHA (1) = 16.540

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0660	.1080	.1820	.2180	.3220	.5180	.6100	.7380	.8800	.8820	.9230	.9540
THETA												
225.000	.2303	.0851	-.0216	-.0678	-.0740	-.0883	-.0717	-.0734	-.0869	-.0695	-.0717	-.0830
247.500		.0347	-.0368	-.0723	-.0706	-.0779	-.0734	-.0734	-.0700	-.0700	-.0621	-.0773
270.000	.1755	.0302	-.0390	-.0717	9.9990	-.0210	-.0283	-.0475	-.0564	-.0582	-.0469	-.0819
292.500		.0336	-.0401	-.0762	-.0548	-.0424	-.0773	-.0740	-.0565	-.0475	-.0328	-.0830
315.000	.2506	.0657	-.0255	-.0717	-.0366	-.0802	-.0813	-.0728	-.0565	-.0480	-.0108	-.0796
326.000									-.0492	-.0384	.0049	-.0835
346.000		.2082	.0893	-.0047	-.0069	-.0261	-.0041	-.0128	.0121	.0431	.0601	-.0790
360.000	.4812	.2393	.0793	-.0069	-.0041	-.0043	-.0114	-.0176	.0144	.0308	.0511	-.0785

MACH (3) = 4.960 ALPHA (1) = 16.450 BETA = .00000 Q(PSI) = 3.0700 PO = 90.017 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4836	.2369	.1159	.0718	.0768	.0831	.0604	.0579	.0667	.0654	.0590	-.0039
14.000		.3011	.1373	.0730	.0629	.0854	.0503	.0427	.0541	.0553	.0868	-.0139
24.000									.0225	.0175	.1674	-.0114
45.000	.8152	.4660	.2392	.1082	.0943	.1107	.1057	.0956	.1094	.1233	.1813	-.0114
67.500		.5857	.3186	.1435	.1220	.1233	.1132	.1082	.1268	.1246	.1951	-.0101
90.000	1.0291	.6348	.3589	.1661	9.9990	.1271	.1271	.1183	.1309	.1309	.1586	-.0026
112.500		.5983	.3324	.1523	.1548	.1132	.1082	.1031	.1157	.1082	.1573	-.0101
135.000	.8339	.4937	.2669	.1107	.0931	.0767	.0704	.0653	9.9990	.0666	.0679	-.0164
157.500		.3526	.1825	.0679	.0578	.0414	.0376	.0313	.0968	.0338	.0200	-.0177
180.000	.4509	.2203	.1019	.0326	.0250	.0200	.0137	.0074	.0212	.0036	-.0064	-.0202
202.500		.1334	.0490	.0124	.0124	.0137	.0036	-.0001	.0099	.0036	-.0127	-.0177
225.000	.2216	.0792	.0225	.0036	.0051	.0099	.0036	-.0051	.0036	-.0039	-.0114	-.0202
247.500		.0527	.0149	.0011	.0049	.0086	-.0026	-.0051	.0011	-.0026	-.0013	.0036
270.000	.1649	.0477	.0112	.0011	9.9990	.0049	-.0026	-.0064	.0036	-.0026	-.0001	-.0064
292.500		.0477	.0099	-.0001	.0086	.0061	-.0026	-.0076	.0023	-.0013	.0023	-.0064
315.000	.2266	.0729	.0149	-.0039	.0061	.0011	-.0039	-.0089	-.0013	-.0051	.0023	-.0039
326.000									-.0051	-.0064	-.0076	-.0064
346.000		.2052	.1031	.0275	.0288	.0225	.0288	.0149	.0263	.0364	.0340	-.0089
360.000	.4836	.2369	.1159	.0718	.0768	.0831	.0604	.0579	.0667	.0654	.0590	-.0039

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A058) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = 20.740 BETA = .00000 Q(PSI) = 10.253 PO = 28.001 P = 3.8220

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4788	.2126	.0232	-.1073	-.1024	-.1405	-.0780	-.0787	-.1062	-.0475	.0077	-.2227
14.000		.2969	.0723	-.0850	-.0733	-.1092	-.1583	-.1530	-.0941	-.0594	.0001	-.2486
24.000									-.1016	-.0724	-.0149	-.2767
45.000	.8855	.5327	.2550	.0703	.0805	.1457	.1284	.1359	.0575	.1216	.3875	-.2680
67.500		.7006	.4017	.1693	.1825	.1709	.1185	.1483	.2051	.1234	.3257	-.2781
90.000	1.1423	.7600	.4576	.2053	9.9990	.2057	.2001	.1612	.1571	.1737	.1753	-.1939
112.500		.7037	.4155	.1724	.1698	.1397	.1246	.1223	.1231	.1140	.2101	-.2594
135.000	.9074	.5651	.2998	.0771	.0760	.0161	.0217	.0127	9.9990	-.0087	-.0017	-.2456
157.500		.3589	.1421	-.0273	-.0393	-.0971	-.0979	-.1050	-.1145	-.1288	-.1284	-.2344
180.000	.4382	.1683	-.0049	-.1338	-.1504	-.2062	-.2099	-.2058	-.2182	-.2193	-.2268	-.2310
202.500		.0440	-.1080	-.2069	-.2359	-.2352	-.2004	-.1835	-.1910	-.1869	-.1945	-.2324
225.000	.1757	-.0312	-.1535	-.2366	-.2355	-.2332	-.2054	-.2114	-.1907	-.1768	-.1806	-.2404
247.500		-.0344	-.1547	-.2264	-.2279	-.2592	-.2494	-.2305	-.1936	-.1849	-.1432	-.2500
270.000	.1590	-.0340	-.1490	-.2051	9.9990	-.0366	-.1135	-.1263	-.1320	-.1339	-.1303	-.2694
292.500		-.0381	-.1549	-.2152	-.1481	-.1538	-.1911	-.1429	-.1251	-.1037	.0258	-.2586
315.000	.2798	.0191	-.1338	-.2291	-.2525	-.2868	-.2167	-.1240	-.1297	-.0701	.0848	-.2276
326.000									-.0951	-.0789	.0837	-.2354
346.000		.1855	.0590	-.0975	-.0843	-.0553	-.0681	-.1095	-.0930	-.0693	.0368	-.2722
360.000	.4788	.2126	.0232	-.1073	-.1024	-.1405	-.0780	-.0787	-.1062	-.0475	.0077	-.2227

MACH (2) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PSI) = 6.8660 PO = 60.046 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4939	.2460	.0902	.0022	.0016	.0056	-.0028	-.0163	.0180	.0304	.0578	-.0807
14.000		.3169	.1325	.0196	.0145	-.0034	-.0356	-.0418	.0050	.0117	.0697	-.0926
24.000									.0026	.0020	.0258	-.0880
45.000	.8870	.5350	.2874	.1228	.1075	.1493	.1566	.1442	.1346	.1211	.3553	-.0740
67.500		.6957	.4104	.1972	.1746	.1831	.1599	.1662	.1910	.1921	.2826	-.0605
90.000	1.1592	.7538	.4555	.2305	9.9990	.1916	.1910	.1780	.1808	.1870	.1897	-.0508
112.500		.7042	.4193	.2058	.1793	.1596	.1596	.1489	.1546	.1517	.1992	-.0700
135.000	.9063	.5663	.3181	.1358	.1082	.0896	.0846	.0784	9.9990	.0756	.0787	-.0796
157.500		.3747	.1908	.0569	.0327	.0125	.0074	.0029	.0198	-.0009	-.0006	-.0863
180.000	.4415	.2089	.0806	-.0121	-.0307	-.0459	-.0526	-.0543	-.0543	-.0594	-.0621	-.0841
202.500		.1009	.0030	-.0549	-.0678	-.0718	-.0740	-.0735	-.0723	-.0746	-.0785	-.0841

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A059)

MACH (2) = 3.480 ALPHA (1) = 20.610

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.1684	.0322	-.0392	-.0757	-.0819	-.0740	-.0757	-.0769	-.0746	-.0769	-.0773	-.0841
247.500		.0025	-.0515	-.0774	-.0802	-.0808	-.0751	-.0768	-.0740	-.0763	-.0672	-.0745
270.000	.1232	.0041	-.0510	-.0763	9.9990	-.0481	-.0645	-.0740	-.0678	-.0650	-.0554	-.0824
292.500		.0064	-.0503	-.0791	-.0588	-.0610	-.0824	-.0751	-.0650	-.0532	-.0339	-.0852
315.000	.1975	.0375	-.0356	-.0762	-.0779	-.0807	-.0841	-.0756	-.0661	-.0503	.0020	-.0796
326.000									-.0491	-.0413	.0104	-.0836
346.000		.2252	.1069	.0065	.0009	-.0001	.0167	.0071	-.0007	.0319	.0618	-.0768
360.000	.4939	.2460	.0902	.0022	.0016	.0056	-.0028	-.0163	.0180	.0304	.0578	-.0807

MACH (3) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(PSI) = 3.0700 PO = 90.016 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4913	.2443	.1309	.0805	.0792	.0944	.0692	.0666	.0742	.0780	.0704	-.0026
14.000		.3110	.1472	.0779	.0616	.0679	.0490	.0452	.0540	.0603	.1334	-.0089
24.000									.0263	.0238	.2241	-.0101
45.000	.8868	.5343	.2923	.1385	.1159	.1562	.1650	.1574	.1625	.1698	.3551	-.0051
67.500		.6953	.4093	.2001	.1687	.1775	.1750	.1787	.2027	.2027	.3236	-.0013
90.000	1.1690	.7713	.4638	.2368	9.9990	.1965	.1978	.1978	.2129	.2167	.2417	.0099
112.500		.7117	.4244	.2115	.2001	.1712	.1661	.1687	.1838	.1800	.2494	-.0013
135.000	.9145	.5718	.3337	.1510	.1246	.1107	.1069	.1107	9.9990	.1107	.1132	-.0001
157.500		.3791	.2027	.0842	.0603	.0565	.0490	.0540	.1183	.0490	.0389	.0023
180.000	.4357	.2179	.1107	.0376	.0275	.0225	.0200	.0212	.0250	.0112	-.0013	.0023
202.500		.1157	.0502	.0149	.0099	.0124	.0061	.0023	.0099	.0049	-.0101	.0023
225.000	.1661	.0565	.0200	.0049	.0023	.0137	.0049	-.0026	.0061	-.0001	-.0101	.0023
247.500		.0301	.0149	.0023	-.0013	0049	-.0013	-.0051	-.0001	-.0039	-.0064	-.0001
270.000	.1220	.0313	.0149	.0023	9.9990	.0086	-.0026	-.0026	.0023	.0011	-.0064	-.0039
292.500		.0275	.0049	-.0064	.0074	.0036	-.0051	-.0076	-.0001	-.0013	-.0051	-.0001
315.000	.1700	.0502	.0112	-.0039	-.0013	.0011	-.0051	-.0039	-.0039	-.0013	-.0101	-.0076
326.000									-.0076	-.0051	-.0152	-.0089
346.000		.2291	.1132	.0351	.0250	0427	.0376	-.0026	.0313	.0414	.0779	-.0114
360.000	.4913	.2443	.1309	.0805	.0792	.0944	.0692	.0666	.0742	.0780	.0704	-.0026

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A059) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = 24.850 BETA = .00000 Q(PSI) = 10.248 PO = 28.006 P = 3.8160

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4949	.2166	.0327	-.0911	-.1145	-.1006	-.0885	-.1402	-.1161	-.0413	-.0284	-.2418
14.000		.2922	.0685	-.0767	-.0729	-.1193	-.1473	-.1733	-.0960	-.0601	.0658	-.2724
24.000									-.1100	-.0714	-.0303	-.2955
45.000	.9421	.5829	.3087	.1142	.1206	.2207	.1985	.2015	.1252	.1951	.4857	-.2720
67.500		.7933	.4957	.2343	.2638	.2543	.1909	.2188	.2959	.1917	.4322	-.2649
90.000	1.2563	.8692	.5631	.2900	9.9990	.2805	.2783	.2371	.2398	.2602	.2556	-.1669
112.500		.8046	.4986	.2511	.2602	.2070	.1953	.1855	.1953	.1858	.3133	-.2399
135.000	.9690	.6264	.3529	.1305	.1380	.0572	.0689	.0561	9.9990	.0394	.0455	-.2604
157.500		.3647	.1560	-.0122	-.0235	-.0838	-.0895	-.0922	-.0955	-.1114	-.1125	-.2472
180.000	.3860	.1393	-.0231	-.1426	-.1652	-.2142	-.2183	-.2281	-.2300	-.2375	-.2402	-.2334
202.500		-.0122	-.1444	-.2324	-.2584	-.2494	-.2226	-.2143	-.2116	-.2120	-.2169	-.2263
225.000	.0606	-.0839	-.1957	-.2686	-.2701	-.2550	-.2244	-.2180	-.2149	-.2093	-.2099	-.2367
247.500		-.0767	-.1877	-.2515	-.2899	-.2598	-.2447	-.2379	-.2175	-.2137	-.1859	-.2452
270.000	.0968	-.0766	-.1708	-.2190	9.9990	-.1421	-.1776	-.1817	-.1614	-.1719	-.1351	-.2645
292.500		-.0820	-.1727	-.2342	-.1779	-.2153	-.2614	-.1583	-.1458	-.1357	-.0148	-.2702
315.000	.1901	-.0269	-.1900	-.2881	-.2738	-.2651	-.2670	-.1503	-.1594	-.1288	.1316	-.2708
326.000									-.0789	-.1477	.1055	-.2747
346.000		.2014	.0791	-.0903	-.0601	-.0333	-.0805	-.1031	-.1295	-.0714	.0130	-.2465
360.000	.4949	.2166	.0327	-.0911	-.1145	-.1006	-.0885	-.1402	-.1161	-.0413	-.0284	-.2418

MACH (2) = 3.480 ALPHA (1) = 24.680 BETA = .00000 Q(PSI) = 6.8610 PO = 60.001 P = .80900

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5079	.2547	.1053	.0128	.0066	.0156	-.0012	-.0232	.0122	.0359	.0698	-.0796
14.000		.3258	.1431	.0292	.0241	.0049	-.0384	-.0260	-.0040	.0089	.0736	-.0903
24.000									-.0018	.0009	.0094	-.0841
45.000	.9462	.5961	.3391	.1632	.1469	.2230	.2360	.2258	.1959	.2021	.4887	-.0632
67.500		.7989	.4994	.2637	.2412	.2581	.2265	.2468	.2812	.2863	.4047	-.0469
90.000	1.2821	.8791	.5640	.3115	9.9990	.2777	.2811	.2653	.2715	.2805	.2767	-.0322
112.500		.8141	.5096	.2778	.2468	.2350	.2214	.2226	.2350	.2310	.2829	-.0649
135.000	.9875	.6367	.3791	.1813	.1520	.1339	.1322	1244	9.9990	.1244	.1277	-.0728
157.500		.3974	.2136	.0765	.0506	.0320	.0258	.0241	.0376	.0224	.0212	-.0875
180.000	.4120	.1995	.0799	-.0097	-.0271	-.0441	-.0486	-.0519	-.0491	-.0525	-.0565	-.0897
202.500		.0748	-.0086	-.0587	-.0694	-.0683	-.0734	-.0773	-.0762	-.0762	-.0847	-.0909

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A059)

MACH (2) = 3.480 ALPHA (1) = 24.680

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.1097	.0009	-.0508	-.0796	-.0830	-.0751	-.0751	-.0802	-.0773	-.0790	-.0835	-.0909
247.500		-.0221	-.0627	-.0807	-.0835	-.0807	-.0801	-.0813	-.0779	-.0779	-.0706	-.0745
270.000	.0798	-.0142	-.0553	-.0762	9.9990	-.0666	-.0756	-.0790	-.0711	-.0717	-.0649	-.0813
292.500		-.0164	-.0604	-.0830	-.0615	-.0649	-.0841	-.0801	-.0694	-.0598	-.0401	-.0858
315.000	.1543	.0240	-.0548	-.0864	-.0795	-.0847	-.0835	-.0796	-.0706	-.0537	-.0074	-.0852
326.000									-.0582	-.0480	-.0142	-.0658
346.000		.2433	.1277	.0161	.0049	.0223	.0313	-.0018	-.0001	.0443	.0585	-.0852
360.000	.5079	.2547	.1053	.0128	.0066	.0156	-.0012	-.0232	.0122	.0359	.0698	-.0796

MACH (3) = 4.960 ALPHA (1) = 24.530 BETA = .00000 Q(PSI) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5038	.2558	.1398	.0818	.0793	.0957	.0654	.0654	.0780	.0793	.1107	-.0001
14.000		.3250	.1637	.0855	.0692	.0654	.0528	.0490	.0603	.0629	.1787	-.0089
24.000									.0313	.0250	.2468	-.0089
45.000	.9435	.5932	.3387	.1712	.1447	.2253	.2455	.2455	.2329	.2367	.5491	.0086
67.500		.8024	.4962	.2619	.2304	.2581	.2594	.2745	.3072	.3072	.4622	.0149
90.000	1.2937	.8855	.5643	.3110	9.9990	.2883	.2959	.2997	.3135	.3186	.3400	.0313
112.500		.8175	.5164	.2795	.2619	.2518	.2493	.2581	.2720	.2694	.3539	.0036
135.000	.9699	.6323	.3891	.1951	.1624	.1548	.1573	.1624	9.9990	.1649	.1661	-.0013
157.500		.4017	.2329	.1019	.0779	.0729	.0628	.0691	.1447	.0729	.0628	-.0089
180.000	.4080	.2140	.1132	.0401	.0301	.0187	.0187	.0212	.0288	.0162	.0023	-.0114
202.500		.1006	.0452	.0149	.0099	.0124	.0061	.0061	.0137	.0099	-.0089	-.0114
225.000	.1220	.0389	.0162	.0023	-.0001	.0099	.0049	.0011	.0099	-.0001	-.0089	-.0190
247.500		.0187	.0112	.0023	-.0001	.0086	-.0013	-.0001	.0023	-.0001	-.0051	.0011
270.000	.0817	.0212	.0061	-.0001	9.9990	.0074	-.0064	-.0026	-.0013	-.0051	-.0076	-.0001
292.500		.0187	.0036	-.0076	.0049	.0074	-.0039	-.0051	-.0013	-.0039	-.0114	-.0051
315.000	.1183	.0376	.0061	-.0064	-.0026	-.0013	-.0051	-.0051	-.0026	-.0051	-.0114	-.0039
326.000									-.0076	-.0089	-.0152	-.0076
346.000		.2493	.1309	.0464	.0275	.0464	.0439	.0137	.0452	.0452	.1057	-.0064
360.000	.5038	.2558	.1398	.0818	.0793	.0957	.0654	.0654	.0780	.0793	.1107	-.0001

MSFC 586 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A060) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 270.000

MACH (1) = 1.960 ALPHA (1) = 28.930 BETA = .00000 Q(PSI) = 10.256 PO = 28.001 P = 3.8260

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5337	.2299	.0519	-.0748	-.1136	-.0940	-.1174	-.1438	-.0861	-.0374	-.0303	-.2451
14.000		.2949	.0791	-.0672	-.0623	-.1419	-.1438	-.1766	-.0993	-.0702	.1074	-.2922
24.000									-.1054	-.0805	-.0676	-.3022
45.000	.8891	.6389	.3654	.1638	.1721	.3149	.2881	.2926	.2071	.2874	.5959	-.2615
67.500		.8970	.5933	.3198	.3548	.3454	.2757	.3141	.3925	.2719	.5609	-.2453
90.000	1.3663	.9936	.6778	.3945	9.9990	.3847	.3813	.3405	.3386	.3658	.3544	-.1334
112.500		.9127	.6080	.3460	.3475	.2985	.2785	.2721	.2826	.2679	.4476	-.1862
135.000	1.0223	.6933	.4221	.1876	.1657	.1126	.1201	.1107	9.9990	.0896	.1096	-.2390
157.500		.3871	.1838	.0123	-.0019	-.0589	-.0687	-.0853	-.0721	-.0857	-.0842	-.2622
180.000	.3384	.1268	-.0281	-.1457	-.1681	-.2110	-.2174	-.2223	-.2257	-.2340	-.2404	-.2525
202.500		-.0508	-.1693	-.2492	-.2734	-.2953	-.2330	-.2330	-.2443	-.2470	-.2457	-.2419
225.000	-.0095	-.1488	-.2447	-.2956	-.2930	-.2847	-.2395	-.2436	-.2482	-.2428	-.2384	-.2403
247.500		-.1248	-.2220	-.2898	-.3071	-.2830	-.2638	-.2551	-.2395	-.2344	-.2149	-.2444
270.000	.0508	-.0954	-.1839	-.2280	9.9990	-.2178	-.2193	-.2137	-.1937	-.2118	-.1816	-.2665
292.500		-.0862	-.1950	-.2557	-.2380	-.2165	-.26	-.1626	-.1671	-.1630	-.0446	-.2045
315.000	.0040	-.1557	-.2744	-.3139	-.2751	-.2661	-.2654	-.1606	-.1971	-.1349	.1202	-.2928
326.000									-.0702	-.1725	.0443	-.2880
346.000		.2138	.1172	-.0812	-.0363	-.0114	-.0650	-.1408	-.1144	-.0352	.0062	-.2441
360.000	.5337	.2299	.0519	-.0748	-.1136	-.0940	-.1174	-.1438	-.0861	-.0374	-.0303	-.2451

MACH (2) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(PSI) = 6.8600 PO = 59.997 P = .80900

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5336	.2653	.1163	.0188	.0028	.0147	.0011	-.0236	.0214	.0344	.0781	-.0785
14.000		.3307	.1520	.0364	.0347	-.0176	-.0362	-.0260	-.0048	.0082	.0726	-.0897
24.000									-.0018	-.0012	-.0260	-.0784
45.000	.9979	.6568	.3946	.2057	.1938	.3156	.3342	.3229	.2784	.2970	.6370	-.0503
67.500		.9039	.5967	.3397	.3188	.3543	.3177	.3464	.3898	.3943	.5488	-.0311
90.000	1.3977	1.0092	.6810	.4030	9.9990	.3861	.3906	.3714	.3771	.3867	.3786	-.0091
112.500		.9229	.6145	.3557	.3258	.3201	.3094	.3117	.3275	.3196	.3791	-.0570
135.000	1.0244	.7019	.4425	.2299	.2017	.1865	.1854	.1808	9.9990	.1808	.1837	-.0621
157.500		.4149	.2367	.0963	.0720	.0545	.0506	.0506	.0630	.0500	.0489	-.0813
180.000	.3810	.1886	.0787	-.0080	-.0244	-.0390	-.0430	-.0187	-.0413	-.0446	-.0480	-.0892
202.500		.0533	-.0182	-.0644	-.0711	-.0728	-.0740	-.0678	-.0734	-.0740	-.0802	-.0897

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A060)

MACH (2) = 3.480 ALPHA (1) = 28.700

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1680	.2180	.3220	.5180	.8100	.7350	.0800	.8920	.9230	.9540
THETA												
225.000	.0613	-.0244	-.0644	-.0858	-.0830	-.0751	-.0773	-.0593	-.0756	-.0768	-.0790	-.0926
247.500		-.0407	-.0717	-.0869	-.0863	-.0818	-.0835	-.0807	-.0773	-.0779	-.0678	-.0734
270.000	.0444	-.0305	-.0644	-.0830	9.9990	-.0762	-.0835	-.0784	-.0762	-.0745	-.0694	-.0818
292.500		-.0345	-.0706	-.0886	-.0627	-.0666	-.0852	-.0835	-.0756	-.0649	-.0604	-.0841
315.000	.0415	-.0328	-.0790	-.0931	-.0847	-.0869	-.0847	-.0852	-.0700	-.0559	-.0672	-.0880
326.000									-.0672	-.0553	-.0830	-.0897
346.000		.2575	.1408	.0184	.0043	.0602	.0433	-.0238	.0292	.0557	.0900	-.0835
360.000	.5336	.2653	.1163	.0186	.0028	.0147	.0011	-.0236	.0214	.0344	.0781	-.0785

MACH (3) = 4.960 ALPHA (1) = 28.540 BETA = .00000 Q(PSI) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5252	.2621	.1360	.0755	.0717	.0919	.0604	.0604	.0742	.0780	.1283	-.0026
14.000		.3327	.1675	.0831	.0730	.0642	.0528	.0478	.0616	.0629	.2140	-.0101
24.000									.0275	.0200	.2090	-.0051
45.000	.9976	.6600	.3967	.2115	.1888	.3224	.3513	.3413	.3312	.3161	.7028	.0149
67.500		.9120	.5932	.3362	.3085	.3652	.3627	.3803	.4196	.4156	.6033	.0238
90.000	1.4184	1.0216	.6776	.3979	9.9990	.4030	.4131	.4080	.4143	.4219	.4282	.0439
112.500		.9347	.6197	.3551	.3350	.3476	.3483	.3488	.3602	.3551	.4483	-.0064
135.000	1.0203	.7028	.4521	.2379	.2090	.2153	.2178	.2190	9.9990	.2216	.2216	-.0064
157.500		.4219	.2543	.1157	.0968	.0943	.0893	.1120	.1510	.0943	.0905	-.0026
180.000	.3778	.2052	.1069	.0376	.0275	.0313	.0225	.0389	.0301	.0200	.0086	-.0001
202.500		.0817	.0351	.0061	.0074	.0124	.0023	.0036	.0099	.0049	-.0089	-.0013
225.000	.0880	.0250	.0111	-.0013	-.0013	.0099	.0049	-.0013	.0049	.0011	-.0101	-.0013
247.500		.0086	.0061	-.0039	-.0051	.0049	-.0026	-.0051	-.0001	-.0013	-.0076	.0023
270.000	.0527	.0112	.0036	-.0064	9.9990	.0011	-.0039	-.0089	-.0026	-.0064	-.0127	-.0013
292.500		.0074	-.0026	-.0152	-.0026	.0036	-.0051	-.0114	-.0026	-.0051	-.0089	-.0039
315.000	.0729	.0149	-.0026	-.0114	-.0051	-.0013	-.0064	-.0076	-.0026	-.0064	-.0152	-.0051
326.000									-.0127	-.0154	-.0127	-.0101
346.000		.2644	.1422	.0477	.0376	.0729	.0452	-.0076	.0452	.0515	.1472	-.0076
360.000	.5252	.2621	.1360	.0755	.0717	.0919	.0604	.0604	.0742	.0780	.1283	-.0026

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A061) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.860 ALPHA (1) = 51.110 BETA = .00000 Q(PSI) = 10.246 PO = 28.013 P = 3.8120

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.1541	-.2126	-.2304	-.1843	-.1488	9.9990	9.9990	-.1794	-.1809	-.1798	-.1794	-.1786
14.000		-.2137	-.2194	-.1990	-.1488	9.9990	9.9990	-.1802	-.1813	-.1802	-.1802	-.1786
24.000									-.1817	-.1802	-.1792	-.1770
45.000	-.2160	-.2208	-.2102	-.1932	-.1449	-.1057	-.1562	-.1845	-.1815	-.1804	-.1793	-.1774
67.500		-.2098	-.1966	-.1800	-.1267	-.1010	-.1501	-.1864	-.1796	-.1788	-.1771	-.1763
90.000	.1003	.0055	-.0930	-.1383	-.1281	-.1111	-.1658	-.1726	-.1768	-.1771	-.1839	-.1748
112.500		.3981	.2475	.1693	.0874	.1202	.1055	.0946	.0887	.1093	.0953	-.1749
135.000	1.0330	.9013	.6784	.5766	.4924	.5305	.5087	.4917	.4826	.4747	.4380	-.1473
157.500		1.3451	1.1038	.9561	.8802	.8768	.8783	.8522	.8473	.8333	.7940	-.0621
180.000	1.6573	1.5320	1.2760	1.1151	1.0468	1.0377	1.0192	.9928	.9743	.9732	.9243	-.0046
202.500		1.3666	1.1192	.9644	.8987	.8843	.8677	.8462	.8337	.8254	.7851	-.0635
225.000	1.0985	.9182	.7022	.5830	.5290	.5245	.4882	.4829	.4829	.4799	.4500	-.1503
247.500		.4140	.2482	.1584	.1251	.1025	.0844	.0897	.0836	.0772	.0658	-.1669
270.000	.1285	.0191	-.0813	-.1229	-.1157	-.1040	-.1554	-.1796	-.1784	-.1773	-.1836	-.1734
292.500		-.2030	-.1777	-.1781	-.1191	-.1006	-.1411	-.1856	-.1807	-.1792	-.1777	-.1754
315.000	-.2111	-.2136	-.1955	-.1820	-.1427	-.1114	-.1506	-.1846	-.1831	-.1808	-.1793	-.1766
326.000									9.9990	-.1770	-.1790	-.1748
346.000		-.2120	-.2094	-.1886	-.1516	9.9990	9.9990	-.1792	-.1818	-.1795	-.1797	-.1778
360.000	-.1541	-.2125	-.2304	-.1843	-.1488	9.9990	9.9990	-.1794	-.1809	-.1798	-.1794	-.1786

MACH (2) = 3.480 ALPHA (1) = 51.000 BETA = .00000 Q(PSI) = 6.8630 PO = 60.021 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0322	-.0424	-.0401	-.0435	-.0446	9.9990	9.9990	-.0497	-.0497	-.0514	-.0587	-.0576
14.000		-.0458	-.0503	-.0480	-.0469	9.9990	9.9990	-.0514	-.0559	-.0548	-.0587	-.0582
24.000									-.0604	-.0599	-.0582	-.0559
45.000	-.0816	-.0503	-.0519	-.0441	-.0412	.0342	-.0074	-.0587	-.0559	-.0559	-.0592	-.0570
67.500		-.0238	-.0554	-.0452	-.0407	-.0159	-.0396	-.0666	-.0616	-.0610	-.0632	-.0570
90.000	.2219	.1356	.0488	.0099	-.0046	.0049	.0077	.0082	.0054	.0065	.0026	-.0610
112.500		.4688	.3188	.2252	.1886	.2213	.2190	.2117	.2190	.2275	.2382	-.0373
135.000	1.1100	.9580	.7061	.5837	.5460	.5837	.5736	.5623	.5550	.5488	.5358	.0398
157.500		1.4191	1.1491	.9479	.9242	.9321	.9270	.9078	.9039	.8960	.8746	.1058
180.000	1.7901	1.6164	1.3334	1.1113	1.1017	1.0978	1.0736	1.0505	1.0443	1.0392	1.0164	.1546
202.500		1.4428	1.1609	.9574	.9434	.9287	.9146	.8994	.8904	.8870	.8673	.1052

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A061)

MACH (2) = 3.480 ALPHA (1) = 51.000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.1874	.9738	.7433	.5911	.5736	.5775	.5572	.5516	.5556	.5556	.5398	.0359
247.500		.4851	.3323	.2365	.2213	.2185	.2128	.2151	.2157	.2112	.1982	.0003
270.000	.2517	.1520	.0753	.0268	.0133	.0065	.0043	.0139	.0139	.0150	.0144	-.0576
292.500		-.0159	-.0441	-.0458	-.0300	-.0171	-.0379	-.0621	-.0571	-.0576	-.0542	-.0576
315.000	-.0486	-.0379	-.0402	-.0452	-.0351	-.0233	-.0447	-.0621	-.0593	-.0599	-.0570	-.0592
326.000									9.9990	.0044	-.0593	-.0576
346.000		-.0384	-.0384	-.0458	-.0413	9.9990	9.9990	-.0576	-.0599	-.0587	-.0593	-.0570
360.000	-.0322	-.0424	-.0401	-.0435	-.0446	9.9990	9.9990	-.0497	-.0497	-.0514	-.0587	-.0576

MACH (3) = 4.960 ALPHA (1) = 51.000 BETA = .00000 Q(PSI) = 3.0710 PO = 90.052 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0026	.0476	.0602	.0602	.0640	9.9990	9.9990	.0778	.0640	.0527	.0023	.0036
14.000		.0299	.0400	.0462	.0488	9.9990	9.9990	.0412	.0400	.0374	.0023	.0011
24.000									.0023	.0036	.0011	.0023
45.000	-.0076	.0199	.0337	.0450	.0400	.1972	.1192	.0312	.0324	.0324	-.0026	-.0013
67.500		.0363	.0287	.0300	.0388	.0488	.0488	.0363	.0249	.0262	-.0051	.0011
90.000	.2518	.1636	.0943	.0615	.0515	.0628	.0603	.0640	.0628	.0628	.0515	-.0064
112.500		.4871	.3423	.2479	.2139	.2516	.2529	.2453	.2529	.2579	.3224	.0263
135.000	1.1425	.9772	.7203	.5918	.5704	.6031	.5993	.5893	.5792	.5729	.5630	.0918
157.500		1.4609	1.1800	.9558	.9445	.9583	.9559	.9394	.9281	.9205	.9057	.1535
180.000	1.8632	1.6665	1.3781	1.1224	1.1224	1.1299	1.1022	1.0846	1.0770	1.0732	1.0468	.1976
202.500		1.4751	1.1891	.9585	.9548	.9548	.9397	.9284	.9132	.9069	.8890	.1561
225.000	1.2232	.9850	.7570	.5920	.5857	.5957	.5794	.5794	.5756	.5743	.5580	.0918
247.500		.4975	.3614	.2556	.2543	.2531	.2430	.2543	.2505	.2442	.2190	.1220
270.000	.2795	.1787	.1195	.0704	.0679	.0616	.0590	.0666	.0679	.0666	.0679	.0074
292.500		.0301	.0212	.0124	.0225	.0288	.0187	.0112	.0086	.0086	.0086	.0023
315.000	.0086	-.0001	.0137	.0137	.0162	.0200	.0162	.0061	.0049	.0074	.0036	-.0013
326.000									9.9990	.1397	.0011	.0011
346.000		-.0001	9086	.0099	.0112	9.9990	9.9990	.0036	.0036	.0011	-.0126	-.0001
360.000	-.0026	.0476	.0602	.0602	.0640	9.9990	9.9990	.0778	.0640	.0527	.0023	.0036

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A062) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 54.110 BETA = .00000 Q(PSI) = 10.243 PO = 28.018 P = 3.8070

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.1824	-.2235	-.2235	-.1975	-.1623	9.9990	9.9990	.3305	-.1793	-.1782	-.1805	-.1816
14.000		-.2188	-.2188	-.2037	-.1670	9.9990	9.9990	-.1795	-.1810	-.1795	- 1823	-.1815
24.000									-.1812	-.1815	-.1836	-.1821
45.000	-.2162	-.2189	-.2102	-.1985	-.1551	-.1150	-.1604	-.1845	-.1808	-.1796	-.1823	-.1804
67.500		-.2185	-.2049	-.1893	-.1330	-.1095	-.1561	-.1878	-.1799	-.1788	-.1804	-.1796
90.000	.0711	-.0070	-.0959	-.1345	-.1500	-.1269	-.1624	-.1659	-.1685	-.1689	-.1802	-.1756
112.500		.3938	.2582	.1875	.1082	.1381	.1286	.1177	.1263	.1309	.1111	-.1812
135.000	1.0168	.9138	.7201	.6249	.5441	.5773	.5577	.5410	.5312	.5184	.4675	-.1366
157.500		1.3735	1.1631	1.0272	.9535	.9452	.9425	.9187	.9165	.9002	.8446	-.0438
180.000	1.6622	1.5798	1.3568	1.2069	1.1367	1.1190	1.0982	1.0771	1.0623	1.0544	.9877	.0198
202.500		1.4022	1.1839	1.0427	.9751	.9559	.9411	.9207	- 17	.8970	.8387	-.0450
225.000	1.0866	.9332	.7423	.6319	.5767	.5703	.5355	.5313	.5332	.5264	.4837	-.1386
247.500		.4073	.2619	.1784	.1456	.1214	.1063	.1108	.1063	.0972	.0809	-.1710
270.000	.1005	.0047	-.0819	-.1204	-.1468	-.1128	-.1683	-.1743	-.1705	-.1709	-.1811	-.1766
292.500		-.2136	-.1978	-.1925	-.1324	-.1075	-.1483	-.1895	-.1815	-.1793	-.1814	-.1799
315.000	-.2197	-.2202	-.2081	-.1983	-.1530	-.1175	-.1583	-.1881	-.1839	-.1809	-.1808	-.1793
326.000									9.9990	-.1785	-.1811	-.1804
346.000		-.2204	-.2178	-.2011	-.1645	9.9990	9.9990	-.1822	-.1838	-.1807	-.1802	-.1813
360.000	-.1824	-.2235	-.2235	-.1975	-.1623	9.9990	9.9990	.3305	-.1793	-.1782	-.1805	-.1816

MACH (2) = 3.480 ALPHA (1) = 54.130 BETA = .00000 Q(PSI) = 6.8670 PO = 60.060 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0441	-.0430	-.0430	-.0441	-.0447	9.9990	9.9990	-.0520	-.0508	-.0543	-.0638	-.0610
14.000		-.0486	-.0554	-.0475	-.0448	9.9990	9.9990	-.0570	-.0587	-.0582	-.0639	-.0633
24.000									-.0633	-.0639	-.0644	-.0622
45.000	-.0672	-.0543	-.0565	-.0492	-.0435	.0245	-.0035	-.0638	-.0599	-.0605	-.0639	-.0622
67.500		-.0295	-.0588	-.0486	-.0430	-.0261	-.0458	-.0717	-.0672	-.0667	-.0723	-.0627
90.000	.2017	.1265	.0465	.0138	-.0024	.0093	.0127	.0076	.0087	.0104	.007C	-.0712
112.500		.4666	.3280	.2447	.2086	.2419	.2402	.2289	.2424	.2492	.2582	-.0334
135.000	1.1002	.9774	.7408	.6350	.5989	.6299	.6215	.6091	.6051	.5989	.5848	.0554
157.500		1.4634	1.2213	1.0393	1.0061	1.0112	1.0056	.9847	.9796	.9734	.9482	.1314
180.000	1.8013	1.6808	1.4201	1.2173	1.1970	1.1903	1.1661	1.1402	1.1334	1.1289	1.1002	.1872
202.500		1.4927	1.2331	1.0444	1.0247	1.0095	.9920	.9729	.9650	.9611	.9419	.1309

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A062)

MACH (2) = 3.480 ALPHA (1) = 54.130

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1000	.1620	.2180	.3220	.5180	.6100	.7380	.8800	.8820	.9230	.9540
THETA												
225.000	1.1835	.8982	.7949	.6395	.6248	.6271	.6017	.5955	.6023	.6001	.5922	.0504
247.500		.4857	.3393	.2531	.2396	.2368	.2267	.2289	.2340	.2238	.2216	.0019
270.000	.2340	.1444	.0723	.0290	.0177	.0109	.0081	.0126	.0177	.0194	.0194	-.0661
292.500		-.0188	-.0486	-.0497	-.0334	-.0233	-.0435	-.0693	-.0633	-.0627	-.0605	-.0628
315.000	-.0571	-.0436	-.0430	-.0481	-.0391	-.0289	-.0492	-.0667	-.0644	-.0633	-.0594	-.0627
326.000									9.9990	-.0042	-.0622	-.0633
346.000		-.0436	-.0441	-.0498	-.0470	9.9990	9.9990	-.0639	-.0661	-.0644	-.0622	-.0627
360.000	-.0441	-.0430	-.0430	-.0441	-.0447	9.9990	9.9990	-.0520	-.0509	- 0543	-.0639	-.0610

MACH (3) = 4.860 ALPHA (1) = 54.130 BETA = .00000 Q(PSI) = 3.0700 PO = J.013 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0061	.0592	.0592	.0567	.0617	9.9990	9.9990	.0491	.0604	.0503	.0023	.0023
14.000		.0427	.0414	.0439	.0502	9.9990	9.9990	.0439	.0351	.0364	-.0001	-.0001
24.000									.0023	.0036	.0011	.0049
45.000	.0011	.0326	.0326	.0465	.0465	.1965	.1385	.0362	.0326	.0339	.0011	.0011
67.500		.0452	.0263	.0301	.0402	.0490	.0465	.0213	.0238	.0226	-.0051	-.0001
90.000	.2480	.1699	.0931	.0679	.0641	.0716	.0704	.0666	.0691	.0691	.0578	-.0051
112.500		.4987	.3526	.2669	.2379	.2732	.2732	.2631	.2732	.2808	.3463	.0288
135.000	1.1504	1.0115	.7583	.6436	.6209	.6537	.6436	.6335	.6260	.6197	.6096	.0968
157.500		1.5268	1.2547	1.0506	1.0430	1.0392	1.0342	1.0140	1.0065	1.0014	.9863	.1825
180.000	1.8864	1.7447	1.4651	1.2307	1.2332	1.2232	1.1942	1.1753	1.1702	1.1652	1.1403	.2368
202.500		1.5381	1.2685	1.0569	1.0480	1.0367	1.0178	1.0039	.9901	.9863	.9674	.1838
225.000	1.2219	1.0216	.8036	.6474	.6386	.6449	.6272	.6247	.6209	.6235	.6093	.1057
247.500		.5139	.3728	.2795	.2795	.2757	.2644	.2732	.2732	.2657	.2480	.1296
270.000	.2682	.1901	.1208	.0767	.0805	.0691	.0653	.0729	.0754	.0754	.0779	.0086
292.500		.0414	.0212	.0112	.0238	.0275	.0137	.0051	.0074	.0086	.0162	.0049
315.000	.0049	.0137	.0124	.0099	.0187	.0175	.0124	.0023	.0011	.0023	.0150	.0024
326.000									9.9990	.1449	.0137	.0023
346.000		.0124	.0099	.0086	.0212	9.9990	9.9990	.0011	.0011	.0011	.0099	.0036
360.000	.0061	.0592	.0592	.0567	.0617	9.9990	9.9990	.0491	.0604	.0503	.0023	.0023

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A063) (16 NOV 74)

REFERENCE DATA

SREF = 572.9550 SQ. FT XMRP = 1088.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 57.110 BETA = .00000 Q(PSI) = 10.228 PO = 28.014 P = 3.7920

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.1732	-.2054	-.2137	-.1994	-.1792	9.9990	9.9990	-.1859	-.1833	-.1840	-.1850	-.1872
14.000		-.2091	-.2136	-.2020	-.1784	9.9990	9.9990	-.1862	-.1847	-.1844	-.1860	-.1875
24.000									-.1831	-.1837	-.1873	-.1877
45.000	-.1958	-.2035	-.2001	-.1944	-.1611	-.1232	-.1660	-.1838	-.1804	-.1808	-.1876	-.1857
67.500		-.2214	-.1998	-.1915	-.1400	-.1203	-.1646	-.1869	-.1797	-.1805	-.1857	-.1857
90.000	.0482	-.0192	-.0976	-.1316	-.1604	-.1438	-.1551	-.1574	-.1612	-.1619	-.1777	-.1815
112.500		.3842	.2677	.2018	.1284	.1572	.1507	.1367	.1469	.1526	.1216	-.1944
135.000	.9840	.9179	.7525	.6673	.5886	.6216	.6022	.5829	.5750	.5583	.4939	-.1213
157.500		1.3959	1.2188	1.0969	1.0227	1.0125	1.0084	.9894	.9788	.9573	.8846	-.0157
180.000	1.6504	1.6102	1.4209	1.2824	1.2087	1.1927	1.1685	1.1541	1.1397	1.1257	1.0393	.0554
202.500		1.4310	1.2420	1.1132	1.0459	1.0210	1.0055	.9896	.9767	.9556	.8779	-.0175
225.000	1.0657	.9415	.7735	.6743	.6240	.6138	.5824	.5794	.5779	.5669	.5038	-.1209
247.500		.3986	.2751	.1982	.1652	.1436	.1311	.1353	.1308	.1190	.0879	-.1789
270.000	.0754	.0070	-.0802	-.1185	-.1511	-.1284	-.1682	-.1647	-.1606	-.1613	-.1777	-.1807
292.500		-.2190	-.1978	-.1986	-.1430	-.1188	-.1574	-.1914	-.1846	-.1831	-.1843	-.1835
315.000	-.1978	-.2040	-.2014	-.2003	-.1605	-.1256	-.1658	-.1881	-.1843	-.1825	-.1857	-.1834
326.000									9.9990	-.1804	-.1861	-.1861
346.000		-.2048	-.2120	-.2014	-.1787	9.9990	9.9990	-.1866	-.1859	-.1848	-.1845	-.1868
360.000	-.1732	-.2054	-.2137	-.1994	-.1792	9.9990	9.9990	-.1859	-.1833	-.1840	-.1850	-.1872

MACH (2) = 3.480 ALPHA (1) = 57.130 BETA = .00000 Q(PSI) = 6.8670 PO = 60.053 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0520	-.0413	-.0446	-.0430	-.0418	9.9990	9.9990	-.0514	-.0508	-.0525	-.0650	-.0616
14.000		-.0503	-.0537	-.0464	-.0447	9.9990	9.9990	-.0497	-.0576	-.0559	-.0650	-.0610
24.000									-.0621	-.0633	-.0644	-.0627
45.000	-.0695	-.0560	-.0548	-.0436	-.0447	.0312	-.0019	-.0560	-.0594	-.0588	-.0650	-.0628
67.500		-.0329	-.0554	-.0481	-.0430	-.0272	-.0486	-.0655	-.0672	-.0650	-.0740	-.0621
90.000	.1862	.1196	.0459	.0177	.0019	.0171	.0194	.0149	.0171	.0183	.0127	-.0734
112.500		.4643	.3370	.2655	.2283	.2649	.2599	.2520	.2644	.2728	.2809	-.0283
135.000	1.0867	.9920	.7758	.6862	.6479	.6840	.6699	.6575	.6547	.6485	.6308	.0741
157.500		1.4995	1.2826	1.1249	1.0923	1.0850	1.0805	1.0619	1.0591	1.0534	1.0229	.1603
180.000	1.7977	1.7236	1.4972	1.3193	1.2922	1.2764	1.2528	1.2308	1.2224	1.2184	1.1852	.2220
202.500		1.5271	1.3007	1.1356	1.1091	1.0861	1.0681	1.0506	1.0422	1.0393	1.0155	.1621

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A063)

MACH (2) = 3.480 ALPHA (1) = 57.130

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.1643	1.0130	.8210	.6943	.6746	.6724	.6487	.6431	.6493	.6510	.6364	.0690
247.500		.4829	.3528	.2768	.2627	.2588	.2492	.2526	.2554	.2509	.2375	.0116
270.000	.2155	.1377	.0763	.0357	.0222	.0194	.0160	.0205	.0262	.0295	.0273	-.0683
292.500		-.0221	- 0492	-.0509	-.0357	-.0261	-.0481	-.0650	-.0638	-.0633	-.0599	-.0644
315.000	-.0618	-.0430	-.0458	-.0497	-.0430	-.0340	-.0531	-.0616	-.0655	-.0633	-.0616	-.0639
326.000									9.9990	-.0003	-.0627	-.0632
346.000		-.0441	-.0458	-.0492	-.0458	9.9990	9.9990	-.0587	-.0644	-.0627	-.0605	-.0616
360.000	-.0520	-.0413	-.0446	-.0430	-.0418	9.9990	9.9990	-.0514	-.0508	- 0525	-.0650	-.0616

MACH (3) = 4.960 ALPHA (1) = 57.130 BETA = .00000 Q(PSI) = 3.0710 PO = 90.060 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0001	.0627	.0589	.0589	.0627	9.9990	9.9990	.0589	.0589	.0501	-.0026	-.0001
14.000		.0500	.0450	.0475	.0488	9.9990	9.9990	.0488	.0387	.0387	-.0001	.0036
.24.000									.0023	.0074	-.0026	-.0001
45.000	.0023	.0413	.0363	.0463	.0413	.2364	.1457	.0526	.0312	.0325	-.0026	-.0013
67.500		.0451	.0275	.0313	.0363	.0539	.0489	.0565	.0225	.0237	-.0102	-.0013
90.000	.2278	.1598	.0943	.0703	.0578	.0766	.0741	.0590	.0703	.0741	.0603	-.0076
112.500		.4912	.3626	.2833	.2531	.2896	.2946	.2795	.2896	.2934	.3689	.0401
135.000	1.1246	1.0153	.7809	.6877	.6600	.7003	.6915	.6789	.6650	.6613	.5510	.1321
157.500		1.5427	1.2996	1.1233	1.0943	1.1183	1.1069	1.0906	1.0704	1.0704	1.0477	.2165
180.000	1.8626	1.7669	1.5251	1.3324	1.3261	1.3110	1.2744	1.2593	1.2455	1.2442	1.2228	.2794
202.500		1.5566	1.3223	1.1485	1.1283	1.1044	1.0817	1.1208	1.0591	1.0603	1.0389	.2202
225.000	1.1901	1.0301	.8412	.7026	.6888	.6900	.6636	.6749	.6651	.6711	.6560	.1308
247.500		.5112	.3865	.3021	.3147	.2983	.2845	.3021	.2933	.2870	.2568	1447
270.000	.2429	.1824	.1107	.0817	.0804	.0766	.0703	.0842	.0804	.0792	.0804	.0137
292.500		.0401	.0200	.0111	.0237	.0275	.0099	.0149	.0061	.0086	.0049	.0049
315.000	.0023	.0036	.0074	.0.37	.0174	.0162	.0099	.0137	.0023	.0051	.0086	.0036
326.000									9.9990	.1484	.0036	.0036
346.000		.0023	.0074	.0061	.0086	9.9990	9.9990	.0187	.0011	.0023	.0123	.0011
360.000	-.0001	.0627	.0589	.0589	.0627	9.9990	9.9990	.0589	.0589	.0501	-.0026	-.0001

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A064) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 60.130 BETA = .00000 Q(PSI) = 10.182 PO = 28.022 P = 3.7410

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.1799	-.1988	-.2087	-.1919	-.1847	9.9990	9.9990	-.0756	-.1836	-.1836	-.1867	-.1867
14.000		-.2028	-.2093	-.1944	-.1854	9.9990	9.9990	-.1754	-.1845	-.1849	-.1869	-.1877
24.000									-.1822	-.1842	-.1883	-.1879
45.000	-.1899	-.2021	-.2025	-.1945	-.1668	-.1310	-.1713	-.1740	-.1827	-.1850	-.1895	-.1887
67.500		-.2199	-.2024	-.1910	-.1492	-.1272	-.1713	-.1735	-.1781	-.1804	-.1869	-.1869
90.000	.0227	-.0330	-.1002	-.1298	-.1598	-.1450	-.1454	-.1499	-.1564	-.1571	-.1747	-.1826
112.500		.3736	.2742	.2128	.1460	.1767	.1714	.1578	.1638	.1669	.1336	-.2080
135.000	.9593	.9220	.7772	.7099	.6343	.6650	.6479	.6301	.6213	.5959	.5212	-.1003
157.500		1.4147	1.2704	1.1606	1.0899	1.0804	1.0781	1.0648	1.0474	1.0170	.9271	.0197
180.000	1.6228	1.6282	1.4822	1.3549	1.2815	1.2708	1.2492	1.2370	1.2093	1.1853	1.0809	.0923
202.500		1.4427	1.2838	1.1724	1.1058	1.0819	1.0671	1.0568	1.0348	1.0093	.9134	.0159
225.000	1.0399	.9478	.8067	.7186	.6683	.6577	.6280	.6311	.6159	.6003	.5229	-.0988
247.500		.3867	.2835	.2167	.1799	.1620	.1575	.1594	.1495	.1332	.0937	-.1879
270.000	.0528	-.0194	-.0777	-.1127	-.1458	-.1412	-.1561	-.1538	-.1500	-.1530	-.1759	-.1804
292.500		-.2175	-.1940	-.1981	-.1507	-.1337	-.1628	-.1913	-.1841	-.1829	-.1852	-.1829
315.000	-.1913	-.2016	-.1982	-.1993	-.1651	-.1340	-.1716	-.1891	-.1853	-.1838	-.1868	-.1870
326.000									9.9990	-.1803	-.1869	-.1850
346.000		-.2017	-.2093	-.1944	-.1838	9.9990	9.9990	-.1876	-.1861	-.1846	-.1883	-.1854
360.000	-.1799	-.1989	-.2087	-.1919	-.1847	9.9990	9.9990	-.0756	-.1836	-.1836	-.1867	-.1867

MACH (2) = 3.480 ALPHA (1) = 60.130 BETA = .00000 Q(PSI) = 6.8630 PO = 60.023 P = .61000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8520	.9230	.9540
THETA												
.000	-.0525	-.0407	-.0441	-.0447	-.0447	9.9990	9.9990	-.0509	-.0526	-.0548	-.0627	-.0627
14.000		-.0531	-.0514	-.0469	-.0446	9.9990	9.9990	-.0542	-.0575	-.0576	-.0616	-.0616
24.000									-.0610	-.0604	-.0627	-.0627
45.000	-.0694	-.0559	-.0503	-.0435	-.0441	.0352	-.0109	-.0531	-.0588	-.0576	-.0638	-.0627
67.500		-.0368	-.0582	-.0492	-.0453	-.0295	-.0515	-.0667	-.0661	-.0661	-.0728	-.0621
90.000	.1700	.1129	.0464	.0233	.0104	.0250	.0273	.0245	.0250	.0262	.0195	-.0762
112.500		.4600	.3478	.2846	.2485	.2874	.2812	.2750	.2885	.2936	.3013	-.0176
135.000	1.0662	1.0024	.8124	.7363	.6951	.7323	.7182	.7075	.7058	.6945	.6751	.0917
157.500		1.5262	1.3441	1.2055	1.1671	1.1643	1.1542	1.1384	1.1333	1.1260	1.0905	.1835
180.000	1.7922	1.7599	1.5728	1.4139	1.3768	1.3627	1.3368	1.3193	1.3086	1.3035	1.2624	.2551
202.500		1.5538	1.3605	1.2179	1.1846	1.1609	1.1423	1.1265	1.1164	1.1096	1.0926	.1892

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A064)

MACH (2) = 3.480 ALPHA (1) = 60.130

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.1435	1.0251	.8594	.7455	.7247	.7230	.6965	.6937	.6982	.6987	.6779	.0888
247.500		.4786	.3648	.2972	.2826	.2809	.2685	.2764	.2775	.2707	.2591	.0184
270.000	.1948	.1317	.0748	.0409	.0313	.0285	.0229	.0285	.0359	.0347	.0347	-.0643
292.500		-.0277	-.0508	-.0531	-.0384	-.0277	-.0520	-.0616	-.0632	-.0655	-.0599	-.0621
315.000	-.0616	-.0430	-.0475	-.0503	-.0413	-.0362	-.0548	-.0592	-.0638	-.0627	-.0604	-.0621
326.000									9.9990	-.0046	-.0576	-.0610
346.000		-.0435	-.0475	-.0492	-.0460	9.9990	9.9990	-.0610	-.0632	-.0621	-.0593	-.0616
360.000	-.0525	-.0407	-.0441	-.0447	-.0447	9.9990	9.9990	-.0509	-.0526	-.0548	-.0627	-.0627

MACH (3) = 4.960 ALPHA (1) = 60.130 BETA = .00000 Q(PSI) = 3.0710 PO = 90.038 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0023	.0603	.0578	.0578	.0565	9.9990	9.9990	.0452	.0540	.0477	-.0013	-.0039
14.000		.0464	.0439	.0477	.0427	9.9990	9.9990	.0351	.0326	.0364	-.0001	.0049
24.000									.0074	.0112	-.0001	.0011
45.000	.0036	.0401	.0364	.0477	.0376	.2266	.1359	.0389	.0288	.0301	-.0001	.0023
67.500		.0426	.0275	.0300	.0300	.0502	.0452	.0200	.0187	.0212	-.0076	.0023
90.000	.2177	.1573	.0943	.0742	.0628	.0805	.0805	.0742	.0742	.0779	.0653	-.0076
112.500		.4935	.3689	.3059	.2656	.3134	.3122	.2996	.3071	.3248	.3778	.0074
135.000	1.1195	1.0402	.8235	.7454	.7114	.7417	.7341	.7215	.7102	.7051	.6940	.1409
157.500		1.5931	1.3815	1.2253	1.1888	1.1838	1.1749	1.1523	1.1460	1.1463	1.1220	.2379
180.000	1.8815	1.8266	1.6213	1.4421	1.3958	1.3945	1.3554	1.3366	1.3340	1.3378	1.3009	.3084
202.500		1.6019	1.3916	1.2347	1.1938	1.1737	1.1573	1.1397	1.1296	1.1296	1.1069	.2429
225.000	1.1812	1.0506	.8742	.7557	.7343	.7381	.7129	.7091	.7117	.7129	.6928	.1409
247.500		.5101	.3954	.3241	.3173	.3148	.3047	.3123	.3098	.3060	.2732	.1460
270.000	.2316	.1774	.1232	.0880	.0817	.0829	.0754	.0804	.0829	.0965	.0830	.0149
292.500		.0363	.0187	.0124	.0187	.0212	.0086	.0061	.0073	.0073	.0111	.0074
315.000	.0011	.0074	.0111	.0124	.0099	.0149	.0086	.0023	.0023	.0049	.0023	.0049
326.000									9.9990	.1472	.0074	.0086
346.000		.0049	.0099	.0112	.0086	9.9990	9.9990	.0049	.0011	0011	.0011	.0036
360.000	.0023	.0503	.0578	.0578	.0565	9.9990	9.9990	.0452	.0540	.0477	-.0013	-.0039

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A065) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 63.130 BETA = .00000 Q(PSI) = 10.259 PO = 28.020 P = 3.8240

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.1925	-.2004	-.2098	-.2064	-.2015	9.9990	9.9990	-.1925	-.1952	-.1955	-.1966	-.1943
14.000		-.2062	-.2073	-.2043	-.2032	9.9990	9.9990	-.1882	-.1953	-.1946	-.1958	-.1939
24.000									-.1932	-.1931	-.1983	-.1960
45.000	-.1924	-.2010	-.1991	-.1998	-.1848	-.1414	-.1780	-.1818	-.1897	-.1919	-.1987	-.1965
67.500		-.2102	-.1981	-.1996	-.1728	-.1397	-.1774	-.1808	-.1830	-.1876	-.1966	-.1951
90.000	-.0042	-.0405	-.0986	-.1292	-.1575	-.1394	-.1394	-.1420	-.1548	-.1564	-.1793	-.1910
112.500		.3693	.2908	.2313	.1634	.1992	.1913	.1796	.1785	.1766	.1352	-.2158
135.000	.9366	.9278	.8190	.7541	.6819	.7133	.6936	.6763	.6528	.6207	.5331	-.0840
157.500		1.4292	1.3326	1.2311	1.1631	1.1473	1.1435	1.1299	1.0956	1.0593	.9536	.0488
180.000	1.6188	1.6564	1.5497	1.4396	1.3679	1.3385	1.3178	1.3080	1.2638	1.2329	1.1175	.1280
202.500		1.4636	1.3509	1.2494	1.1846	1.1491	1.1288	1.1193	1.0835	1.0500	.9425	.0458
225.000	1.0053	.9464	.8438	.7639	.7168	.7006	.6735	.6727	.6471	.6252	.5377	-.0797
247.500		.3751	.2903	.2318	.2001	.1794	.1756	.1760	.1605	.1409	.0945	-.2087
270.000	.0255	-.0370	-.0822	-.1130	-.1462	-.1541	-.1556	-.1534	-.1534	-.1575	-.1788	-.1879
292.500		-.2098	-.2042	-.2019	-.1581	-.1327	-.1664	-.1932	-.1868	-.1883	-.1953	-.1926
315.000	-.1943	-.2015	-.2053	-.2064	-.1706	-.1438	-.1785	-.1947	-.1906	-.1917	-.1957	-.1934
326.000									9.9990	-.1893	-.1966	-.1936
346.000		-.2037	-.2086	-.2048	-.1950	9.9990	9.9990	-.1939	-.1939	-.1935	-.1962	-.1940
360.000	-.1925	-.2004	-.2098	-.2064	-.2015	9.9990	9.9990	-.1925	-.1952	-.1955	-.1966	-.1943

MACH (2) = 3.480 ALPHA (1) = 63.130 BETA = .00000 Q(PSI) = 6.8620 PO = 60.012 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0457	-.0418	-.0463	-.0451	-.0451	9.9990	9.9990	-.0508	-.0497	-.0508	-.0615	-.0593
14.000		-.0462	-.0497	-.0486	-.0475	9.9990	9.9990	-.0537	-.0570	-.0565	-.0621	-.0604
24.000									-.0593	-.0599	-.0615	-.0610
45.000	-.0520	-.0457	-.0491	-.0474	-.0469	.0365	-.0125	-.0519	-.0576	-.0559	-.0621	-.0604
67.500		-.0424	-.0593	-.0559	-.0480	-.0317	-.0531	-.0514	-.0672	-.0655	-.0734	-.0616
90.000	.1526	.1035	.0454	.0251	.0133	.0319	.0325	.0325	.0297	.0319	.0251	-.0740
112.500		4524	.3655	.3008	.2653	.3053	.3025	.2963	.3081	.3171	.3156	-.0108
135.000	1.0414	1.0009	.8430	.7788	.7359	.7743	.7624	.7545	.7517	.7444	.7106	.1024
157.500		1.5448	1.3982	1.2776	1.2370	1.2359	1.2280	1.2162	1.2072	1.1976	1.1479	.2181
180.000	1.7731	1.7836	1.6399	1.5035	1.4601	1.4438	1.4190	1.4083	1.3897	1.3841	1.3289	.2923
202.500		1.8707	1.4213	1.2951	1.2517	1.2328	1.2150	1.2026	1.1883	1.1818	1.1350	.2168

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A065)

MACH (2) = 3.480 ALPHA (1) = 63.130

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8800	.8920	.9230	.9540
THETA												
225.000	1.1130	1.0263	.6822	.7808	.7671	.7677	.7395	.7401	.7412	.7428	.7108	.1063
247.500		.4893	.3748	.3143	.3002	.3008	.2895	.2974	.2987	.2895	.2854	.0213
270.000	.1773	.1218	.0748	.0454	.0359	.0347	.0302	.0375	.0415	.0426	.0375	-.0655
292.500		-.0334	-.0525	-.0559	-.0424	-.0300	-.0531	-.0621	-.0616	-.0621	-.0559	-.0604
315.000	-.0491	-.0475	-.0514	-.0525	-.0492	-.0413	-.0542	-.0627	-.0621	-.0604	-.0570	-.0610
328.000									9.9990	-.0663	-.0582	-.0599
346.000		-.0475	-.0531	-.0514	-.0514	9.9990	9.9990	-.0604	-.0599	-.0587	-.0593	-.0604
360.000	-.0457	-.0418	-.0463	-.0451	-.0451	9.9990	9.9990	-.0508	-.0497	-.0508	-.0615	-.0593

MACH (3) = 4.860 ALPHA (1) = 63.130 BETA = .00000 Q(PSI) = 3.0720 PO = 90.065 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0023	.0625	.0650	.0588	.0663	9.9990	9.9990	.0525	.0625	.0525	.0049	.0049
14.000		.0461	.0499	.0448	.0474	9.9990	9.9990	.0499	.0386	.0386	.0011	-.0001
24.000									.0023	.0036	.0011	.0011
45.000	.0011	.0400	.0413	.0450	.0388	.2398	.1243	.0538	.0337	.0325	.0011	.0011
67.500		.0388	.0299	.0274	.0350	.0488	.0476	.0237	.0237	.0249	-.0039	.0023
90.000	.1964	.1445	.0942	.0703	.0652	.0841	.0854	.0778	.0803	.0816	.0716	-.0051
112.500		.4833	.3763	.3158	.2844	.3322	.3221	.3184	.3284	.3373	.3841	.0452
135.000	1.0921	1.0392	.8555	.7872	.7545	.7898	.7784	.7658	.7559	.7482	.7268	.1635
157.500		1.6145	1.4420	1.3072	1.2644	1.2568	1.2455	1.2253	1.2228	1.2152	1.1791	.2869
180.000	1.8720	1.8628	1.6951	1.5377	1.4838	1.4722	1.4389	1.4206	1.4180	1.4180	1.3693	3413
202.500		1.8291	1.4800	1.3114	1.2610	1.2484	1.2257	1.2118	1.1992	1.1992	1.1635	.2707
225.000	1.1602	1.0559	.9047	.7900	.7761	.7774	.7560	.7522	.7547	.7535	.7331	.1686
247.500		.4987	.4042	.3324	.3337	.3350	.3236	.3324	.3312	.3236	.2921	.1535
270.000	.2140	.1661	.1208	.0855	.0931	.0868	.0833	.0893	.0943	.0905	.0905	.0112
292.500		.0301	.0175	.0061	.0187	.0200	.0137	.0149	.0099	.0074	.0124	.0049
315.000	-.0001	.0112	.0124	.0049	.0124	.0124	.0086	.0212	.0049	.0049	.0074	.0124
326.000									9.9990	.1271	.0099	.0074
346.000		.0086	.0099	.0049	.0112	9.9990	9.9990	.0061	.0035	.0023	.0099	.0023
360.000	.0023	.0625	.0650	.0588	.0663	9.9990	9.9990	.0525	.0525	.0525	.0049	.0049

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A086) (16 NOV 74)

MSFC 596 (TA-2F) MCR020U EXTERNAL TANK, T2

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1886.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 66.130 BETA = .00000 Q(PSI) = 10.182 PO = 28.019 P = 3.7410

DEPENDENT VARIABLE CP

SECTION (1)ANK											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.1933	-.2097	-.2059	-.2116	-.2018	9.9990	9.9990	.6225	-.2040	-.2025	-.2020	-.1975
14.000		-.2101	-.2075	-.2116	-.2025	9.9990	9.9990	-.1797	-.2052	-.2048	-.2012	-.1974
24.000									-.2017	-.2012	-.2020	-.1990
45.000	-.1935	-.2060	-.2064	-.2083	-.1855	-.1506	-.1848	-.1897	-.2003	-.2026	-.2037	-.2002
67.500		-.2131	-.2085	-.2051	-.1758	-.1514	-.1842	-.1891	-.1937	-.1990	-.2019	-.2008
90.000	-.0227	-.0547	-.0998	-.1285	-.1498	-.1346	-.1308	-.1384	-.1464	-.1517	-.1757	-.1958
112.500		.3509	.2889	.2372	.1817	.2170	.2102	.1969	.1980	.1938	.1489	-.2085
135.000	.8943	.9135	.8192	.7781	.7139	.7443	.7261	.7143	.6873	.6512	.5586	-.0558
157.500		1.4330	1.3584	1.2782	1.2097	1.1987	1.1911	1.1770	1.1394	1.0952	.9854	.0915
180.000	1.5658	1.6474	1.5817	1.4893	1.4171	1.4061	1.3856	1.3658	1.3130	1.2724	1.1515	.1783
202.500		1.4555	1.3715	1.2853	1.2249	1.1964	1.1873	1.1740	1.1288	1.0877	.9732	.0857
225.000	.9710	.9446	.8610	.7883	.7518	.7343	.7073	.7085	.6784	.6510	.5541	-.0522
247.500		.3599	.2957	.2445	.2141	.1966	.1940	.1940	.1723	.1492	.1022	-.2005
270.000	.0022	-.0475	-.0820	-.1105	-.1390	-.1470	-.1451	-.1447	-.1466	-.1527	-.1758	-.1921
292.500		-.2117	-.2083	-.2102	-.1737	-.1475	-.1787	-.1965	-.1957	-.1976	-.1971	-.1941
315.000	-.1960	-.2047	-.2074	-.2119	-.1796	-.1553	-.1884	-.1967	-.1979	-.1986	-.1991	-.1949
326.000									9.9990	-.1953	-.2019	-.1962
346.000		-.2108	-.2077	-.2127	-.1994	9.9990	9.9990	-.1986	-.2024	-.2020	-.2023	-.1958
360.000	-.1933	-.2097	-.2059	-.2116	-.2018	9.9990	9.9990	.6225	-.2040	-.2025	-.2020	-.1975

MACH (2) = 3.480 ALPHA (1) = 66.130 BETA = .00000 Q(PSI) = 6.8610 PO = 60.007 P = .80900

DEPENDENT VARIABLE CP

SECTION (1)ANK											
X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0551	-.0471	-.0493	-.0516	-.0476	9.9990	9.9990	-.0521	-.0527	-.0538	-.0641	-.0618
14.000		-.0511	-.0533	-.0545	-.0499	9.9990	9.9990	-.0539	-.0590	-.0578	-.0630	-.0624
24.000									-.0641	-.0635	-.0630	-.0607
45.000	-.0551	-.0517	-.0550	-.0534	-.0488	.0317	-.0252	-.0517	-.0601	-.0590	-.0641	-.0613
67.500		-.0488	-.0635	-.0613	-.0488	-.0398	-.0567	-.0629	-.0686	-.0663	-.0759	-.0635
90.000	.1331	.0925	.0401	.0226	.0170	.0339	.0378	.0373	.0333	.0350	.0232	-.0754
112.500		.4401	.3606	.3110	.2806	.3229	.3195	.3144	.3251	.3330	.3191	-.0077
135.000	1.0062	.9986	.8647	.8146	.7723	.8123	.7999	.7931	.7881	.7774	.7238	.1213
157.500		1.5607	1.4425	1.3365	1.2959	1.2959	1.2875	1.2785	1.2666	1.2542	1.1776	.2498
180.000	1.7440	1.7951	1.6909	1.5725	1.5309	1.5083	1.4852	1.4801	1.4610	1.4508	1.3670	.3309
202.500		1.5755	1.4622	1.3540	1.3145	1.2892	1.2728	1.2655	1.2486	1.2373	1.1629	.2475

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A066)

MACH (2) = 3.480 ALPHA (1) = 66.130

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.0795	1.0180	.9155	.8264	.8044	.8038	.7740	.7802	.7785	.7768	.7221	.1246
247.500		.4536	.3770	.3257	.3167	.3150	.3048	.3150	.3105	.3015	.2718	.0249
270.000	.1628	.1097	.0719	.0437	.0408	.0392	.0324	.0425	.0454	.0448	.0390	-.0675
292.500		-.0421	-.0585	-.0635	-.0455	-.0410	-.0598	-.0528	-.0652	-.0641	-.0562	-.0613
315.000	-.0590	-.0551	-.0556	-.0579	-.0489	-.0489	-.0573	-.0477	-.0630	-.0607	-.0579	-.0607
326.000									9.9990	-.0167	-.0596	-.0624
346.000		-.0562	-.0568	-.0579	-.0534	9.9990	9.9990	-.0607	-.0641	-.0619	-.0585	-.0624
360.000	-.0551	-.0471	-.0493	-.0516	-.0476	9.9990	9.9990	-.0521	-.0527	-.0538	-.0641	-.0618

MACH (3) = 4.960 ALPHA (1) = 66.130 BETA = .00000 Q(PSI) = 3.0700 PO = 90.015 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0017	.0535	.0497	.0434	.0485	9.9990	9.9990	.0459	.0485	.0371	-.0020	-.0020
14.000		.0395	.0345	.0332	.0383	9.9990	9.9990	.0408	.0269	.0244	-.0057	-.0070
24.000									-.0045	-.0045	-.0057	-.0057
45.000	-.0007	.0345	.0282	.0332	.0307	.2311	.1089	.0458	.0232	.0219	-.0095	-.0095
67.500		.0307	.0194	.0181	.0270	.0434	.0370	.0219	.0156	.0144	-.0146	-.0070
90.000	.1756	.1327	.0849	.0660	.0609	.0849	.0849	.0861	.0773	.0786	.0660	-.0133
112.500		.4641	.3734	.3242	.2940	.3482	.3507	.3406	.3431	.3494	.3948	.0156
135.000	1.0487	1.0285	.8710	.8206	.7904	.8370	.8244	.8106	.7942	.7803	.7463	.1642
157.500		1.6232	1.4884	1.3674	1.3397	1.3372	1.3183	1.3032	1.2830	1.2742	1.2125	.2940
180.000	1.8323	1.8709	1.7681	1.6370	1.5955	1.5539	1.5161	1.5035	1.4846	1.4758	1.4040	.3759
202.500		1.6484	1.5325	1.4153	1.3662	1.3170	1.2943	1.2830	1.2603	1.2553	1.1948	.3003
225.000	1.1230	1.0663	.9554	.8584	.8395	.8194	.7929	.7954	.7917	.7891	.7463	.1756
247.500		.4968	.4162	.3545	.3520	.3482	.3318	.3507	.3406	.3305	.2902	.1466
270.000	.1882	.1592	.1189	.0887	.0924	.0874	.0811	.0962	.0937	.0912	.0849	.0030
292.500		.0219	.0093	-.0032	.0080	.0118	.0017	.0080	.0005	-.0020	.0068	.0005
315.000	-.0070	.0055	.0030	-.0020	.0030	.0055	.0005	.0055	-.0045	-.0020	-.0020	-.0057
326.000									9.9990	.1151	.0005	-.0057
346.000		.0017	.0005	-.0045	-.0020	9.9990	9.9990	.0105	-.0045	-.0057	-.0020	-.0045
360.000	.0017	.0535	.0497	.0434	.0485	9.9990	9.9990	.0459	.0485	.0371	-.0020	-.0020

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A067) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 60.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 69.130 BETA = .00000 Q(PSI) = 10.184 PO = 28.019 P = 3.7440

DEPENDENT VARIABLE CP

SECTION (1)ANK

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2012	-.2153	-.2149	-.2206	-.2092	9.9990	9.9990	-.1913	-.2149	-.2107	-.2073	-.2062
14.000		-.2148	-.2152	-.2198	-.2099	9.9990	9.9990	-.1807	-.2156	-.2107	-.2088	-.2077
24.000									-.2126	-.2107	-.2100	-.2084
45.000	-.2024	-.2115	-.2146	-.2161	-.1948	-.1606	-.1922	-.1918	-.2127	-.2119	-.2122	-.2096
67.500		-.2198	-.2190	-.2156	-.1883	-.1671	-.1955	-.1921	-.2084	-.2126	-.2114	-.2088
90.000	-.0444	-.0632	-.1008	-.1286	-.1461	-.1297	-.1248	-.1343	-.1438	-.1495	-.1737	-.2064
112.500		.3368	.2120	.2464	.1952	.2297	.2244	.2100	.2096	.2013	.1559	-.1917
135.000	.8568	.9058	.8 [illegible]	.8085	.7492	.7803	7621	.7522	.7157	.6765	.5772	-.0197
157.500		1.4287	1.3681	1.3215	1.2573	1.2462	1.2432	1.2284	1.1835	1.1406	1.0239	.1519
180.000	1.5218	1.6483	1.6166	1.5450	1.4767	1.4615	1.4399	1.4171	1.3538	1.3132	1.1895	.2396
202.500		1.4468	1.3994	1.3308	1.2759	1.2425	1.2372	1.2232	1.1622	1.1159	.9966	.1393
225.000	.9297	.9297	.8750	.8146	.7846	.7649	.7440	.7398	.7075	.6756	.5735	-.0166
247.500		.3459	.2998	.2554	.2299	.2106	.2102	.2106	.1682	.1604	.1114	-.1853
270.000	-.0212	-.0584	-.0861	-.1104	-.1328	-.1431	-.1400	-.1389	-.1438	-.1514	-.1750	-.2046
292.500		-.2162	-.2179	-.2181	-.1817	-.1661	-.1923	-.2045	-.2075	-.2075	-.2088	-.2062
315.000	-.2016	-.2118	-.2175	-.2202	-.1898	-.1727	-.2004	-.2057	-.2111	-.2103	-.2100	-.2065
326.000									9.9990	-.2035	-.2107	-.2069
346.000		-.2157	-.2160	-.2210	-.2084	9.9990	9.9990	-.2031	-.2134	-.2092	-.2094	-.2087
360.000	-.2012	-.2153	-.2 [illegible]	-.2206	-.2092	9.9990	9.9990	-.1913	-.2149	-.2107	-.2073	-.2062

MACH (2) = 3.480 ALPHA (1) = 69.130 BETA = .00000 Q(PSI) = 6.8610 PO = 60.009 P = .80900

DEPENDENT VARIABLE CP

SECTION (1)ANK

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0579	-.0475	-.0487	-.0509	-.0464	9.9990	9.9990	-.0509	-.0509	-.0526	-.0630	-.0613
14.000		-.0517	-.0534	-.0545	-.0494	9.9990	9.9990	-.0551	-.0573	-.0573	-.0630	-.0618
24.000									-.0624	-.0624	-.0623	-.0618
45.000	-.0585	-.0528	-.0545	-.0539	-.0517	.0294	-.0252	-.0539	-.0596	-.0579	-.0630	-.0630
67.500		-.0528	-.0652	-.0641	-.0545	-.0477	-.0585	-.0652	-.0686	-.0680	-.0725	-.0613
90.000	.1176	.0846	.0423	.0254	.0232	.0401	.0463	.0440	.0384	.0384	.0220	-.0737
112.500		.4290	.3659	.3253	.2992	.3405	.3394	.3321	.3411	.3445	.3208	.0001
135.000	.9670	.9887	.8878	.8518	.8084	.8518	.8422	.8326	.8247	.8067	.7373	.1432
157.500		1.5530	1.4831	1.3929	1.3500	1.3517	1.3467	1.3371	1.3196	1.2999	1.2085	.2926
180.000	1.7042	1.7970	1.7356	1.6375	1.5935	1.5733	1.5535	1.5456	1.5242	1.5045	1.4023	.3829
202.500		1.5748	1.4999	1.4103	1.3697	1.3427	1.3320	1.3229	1.3015	1.2813	1.1928	.2909

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A067)

MACH (2) = 3.480 ALPHA (1) = 69.130

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.0409	1.0107	.9363	.8613	.8422	.8399	.8157	.8174	.8123	.8023	.7334	.1508
247.500		.4406	.3860	.3392	.3313	.3319	.3240	.3324	.3240	.3099	.2701	.0328
270.000	.1325	.1004	.0728	.0485	.0457	.0440	.0406	.0508	.0491	.0468	.0373	-.0658
292.500		-.0468	-.0568	-.0658	-.0511	-.0477	-.0613	-.0494	-.0647	-.0647	-.0550	-.0629
315.000	-.0596	-.0556	-.0562	-.0596	-.0534	-.0517	-.0573	-.0601	-.0630	-.0613	-.0579	-.0608
326.000									9.9990	-.0163	-.0579	-.0630
346.000		-.0568	-.0585	-.0590	-.0551	9.9990	9.9990	-.0590	-.0630	-.0624	-.0596	-.0613
360.000	-.0579	-.0475	-.0487	-.0509	-.0484	9.9990	9.9990	-.0509	-.0509	-.0526	-.0630	-.0613

MACH (3) = 4.960 ALPHA (1) = 69.130 BETA = .00000 Q(PSI) = 3.0710 PO = 90.039 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0055	.0635	.0648	.0560	.0623	9.9990	9.9990	.0560	.0623	.0509	.0030	.0030
14.000		.0483	.0470	.0407	.0508	9.9990	9.9990	.0470	.0382	.0344	.0030	.0017
24.000									-.0007	.0030	.0005	-.0007
45.000	.0055	.0420	.0369	.0432	.0432	.2195	.1049	.0521	.0332	.0306	.0005	-.0032
67.500		.0357	.0281	.0268	.0357	.0457	.0445	.0558	.0243	.0268	-.0070	.0005
90.000	.1668	.1314	.0911	.0735	.0760	.0936	.0961	.0898	.0873	.0873	.0710	-.0095
112.500		.4639	.3884	.3443	.3254	.3657	.3682	.3556	.3607	.3632	.4024	.0534
135.000	1.0273	1.0345	.9048	.8708	.8393	.8645	.8582	.8405	.8257	.8065	.7513	.1894
157.500		1.6378	1.5509	1.4401	1.3897	1.3733	1.3607	1.3393	1.3242	1.3078	1.2276	.3368
180.000	1.8134	1.9035	1.8280	1.6983	1.6240	1.6000	1.5572	1.5471	1.5358	1.5207	1.4355	.4301
202.500		1.6610	1.5652	1.4455	1.3863	1.3573	1.3284	1.3221	1.3082	1.2931	1.2150	.3431
225.000	1.0953	1.0547	.9678	.8708	.8531	.8494	.8191	.8242	.8204	.8103	.7513	.2058
247.500		.4816	.4161	.3619	.3808	.3657	.3506	.3670	.3594	.3393	.2953	.1630
270.000	.1781	.1491	.1227	.0899	.1012	.0962	.0899	.1050	.1000	.0952	.0899	.0156
292.500		.0231	.0143	.0017	.0206	.0181	.0063	.0105	.0080	.0055	.0131	.0030
315.000	.0042	.0105	.0118	.0042	.0130	.0143	.0080	.0067	.0042	.0042	.0080	.0030
326.000									9.9990	.1075	.0105	.0005
346.000		.0093	.0093	.0030	.0143	9.9990	9.9990	.0118	.0055	.0030	.0080	.0017
360.000	.0055	.0635	.0648	.0560	.0623	9.9990	9.9990	.0560	.0623	.0509	.0030	.0030

MSFC 698 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A068) (18 NOV 74)

REFERENCE DATA

SREF = 672.5850 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 80.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.950 ALPHA (1) = 69.960 BETA = .00000 Q(PSI) = 10.256 PO = 28.018 P = 3.8210

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THET.												
.000	-.2000	-.2116	-.2120	-.2188	-.2048	9.9990	9.9990	-.1723	-.2139	-.2123	-.2098	-.2083
14.000		-.2127	-.2139	-.2192	-.2071	9.9990	9.9990	-.2109	-.2143	-.2139	-.2105	-.2090
24.000									-.2136	-.2132	-.2105	-.2097
45.000	-.2003	-.2093	-.2127	-.2165	-.1923	-.1572	-.1954	-.2112	-.2116	-.2109	-.2098	-.2075
67.500		-.2145	-.2149	-.2171	-.1847	-.1602	-.1987	-.2134	-.2111	-.2122	-.2117	-.2099
90.000	-.0476	-.0631	-.1072	-.1299	-.1472	-.1276	-.1261	-.1344	-.1465	-.1537	-.1768	-.2077
112.500		.3480	.2978	.2559	.2005	.2408	.2322	.2163	.2122	.2020	.1556	-.1951
135.000	.8685	.9197	.8636	.8195	.7618	.7920	.7709	.7588	.7226	.6770	.5780	-.0174
157.500		1.4253	1.4170	1.3378	1.2857	1.2646	1.2638	1.2480	1.1940	1.1469	1.0300	.1582
180.000	1.5154	1.6294	1.6336	1.5630	1.5144	1.4691	1.4597	1.4393	1.3842	1.3382	1.2106	.2537
202.500		1.4427	1.4329	1.3570	1.3148	1.2680	1.2491	1.2291	1.1797	1.1344	1.0102	.1483
225.000	.9236	.9275	.8925	.8337	.7948	.7805	.7503	.7466	.7051	.6735	.5760	-.0125
247.500		.3447	.3013	.2605	.2270	.2115	.2126	.2107	.1809	.1523	.1047	-.1823
270.000	-.0276	-.0570	-.0860	-.1105	-.1358	-.1452	-.1407	-.1428	-.1475	-.1577	-.1841	-.2037
292.500		-.2138	-.2145	-.2161	-.1791	-.1550	-.1840	-.2089	-.2096	-.2127	-.2120	-.2063
315.000	-.2015	-.2100	-.2145	-.2183	-.1878	-.1625	-.1949	-.2074	-.2127	-.2134	-.2121	-.2057
326.000									9.9990	-.2060	-.2117	-.2072
346.000		-.2132	-.2140	-.2196	-.2049	9.9990	9.9990	-.2053	-.2155	-.2140	-.2118	-.2058
360.000	-.2000	-.2116	-.2120	-.2188	-.2048	9.9990	9.9990	-.1723	-.2139	-.2123	-.2098	-.2083

MACH (2) = 3.480 ALPHA (1) = 69.980 BETA = .00000 Q(PSI) = 6.8635 PO = 60.030 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0425	-.0419	-.0419	-.0452	-.0424	9.9990	9.9990	-.0458	-.0497	-.0526	-.0576	-.0582
14.000		-.0435	-.0446	-.0480	-.0458	9.9990	9.9990	-.0508	-.0537	-.0548	-.0576	-.0571
24.000									-.0582	-.0582	-.0582	-.0582
45.000	-.0430	-.0441	-.0447	-.0469	-.0469	.0516	-.0024	-.0509	-.0554	-.0548	-.0582	-.0582
67.500		-.0492	-.0543	-.0531	-.0475	-.0289	-.0537	-.0497	-.0644	-.0638	-.0683	-.0593
90.000	.1184	.0859	.0471	.0290	.0228	.0448	.0488	.0510	.0437	.0414	.0268	-.0700
112.500		.4315	.3724	.3328	.3013	.3478	.3453	.3425	.3493	.3498	.3329	.0105
135.000	.8877	.8919	.8995	.8829	.8190	.8840	.8516	.8460	.8359	.8139	.7429	.1858
157.500		1.5542	1.4958	1.4083	1.3855	1.3849	1.3827	1.3859	1.3390	1.3185	1.2198	.3074
180.000	1.6640	1.7878	1.7468	1.6940	1.6083	1.5909	1.5788	1.5881	1.5424	1.5193	1.4148	.4015
202.500		1.5734	1.5088	1.4224	1.3913	1.3578	1.3483	1.3390	1.3159	1.2917	1.1978	.3062

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A068)

MACH (2) = 3.480 ALPHA (1) = 69.980

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.0302	1.0071	.9457	.8680	.8477	.8488	.8257	.8302	.8218	.8088	.7367	.1643
247.500		.4428	.3932	.3453	.3414	.3397	.3295	.3464	.3340	.3171	.2698	.0584
270.000	.1327	.1024	.0787	0522	.0511	.0477	.0437	.0567	.0556	.0505	.0358	-.0599
292.500		-.0435	-.0469	-.0520	-.0407	-.0182	-.0543	-.053[illegible]	-.0576	-.0553	-.0520	-.0593
315.000	-.0452	-.0463	-.0446	-.0492	-.0458	-.0351	-.0525	-.0492	- 0576	-.057[illegible]	-.0559	-.0582
326.000									9.9990	-.0019	-.0559	-.0588
346.000		-.0475	-.0469	-.0497	-.0458	9.9990	9.9990	-.0469	-.0599	-.0588	-.0559	-.0582
360.000	-.0435	-.0419	-.0419	-.0452	-.0424	9.9990	9.9990	-.0458	-.0497	-.0526	-.0576	-.0582

MACH (3) = 4.960 ALPHA (1) = 69.980 BETA = .00000 Q(PSI) = 3.0700 PO = 90.031 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0105	.0496	.0483	.0446	.0521	9.9990	9.9990	.0395	.0446	.0320	.0030	.0004
19.000		.0370	.0383	.0357	.0395	9.9990	9.9990	.0357	.0269	.0257	.0017	-.0020
24.000									.0017	.0030	.0005	.0005
45.000	.0093	.0332	.0282	.0357	.0370	.2146	.0937	.0231	.0244	.0206	-.0007	-.0007
67.500		.0269	.0194	.0194	.0294	.0446	.0320	.0231	.0143	.0131	-.0095	-.0032
90.000	.1630	.1290	.0899	.0761	.0761	.0937	.0987	.0962	.0899	.0874	.0697	-.0083
112.500		.4602	.3909	.3544	.3342	.3783	.3758	.3644	.3670	.3695	.3997	.0571
135.000	1.0147	1.0323	.9202	.8887	.8547	.8887	.8786	.8622	.8446	.8232	.7627	.1907
157.500		1.6479	1.5648	1.4640	1.4174	1.4136	1.3935	1.3733	1.3544	1.3292	1.2452	.3494
180.000	1.8159	1.9192	1.8474	1.7340	1.6761	1.6446	1.5992	1.5879	1.5614	1.5375	1.4531	.4490
202.500		1.6761	1.5980	1.4934	1.4390	1.3977	1.3674	1.3561	1.3321	1.3145	1.2288	.3532
225.000	1.0978	1.0647	.9892	.9048	.8871	.8595	.8393	.8390	.8330	.8229	.7549	.2070
247.500		.4854	.4287	.3796	.3846	.3745	.3569	.3720	.3632	.3443	.2927	.1768
270.000	.1781	.1504	.1252	.0987	.1038	.0987	.0899	.1053	.1025	.0962	.0887	.0143
292.500		.0206	.0143	.0080	.0206	.0219	.0055	.0093	.0068	.0042	.0143	-.0057
315.000	.0055	.0130	.0130	.0080	.0143	.0143	.0055	.0030	.0017	.0004	.0105	.0005
326.000									9.9990	.1050	.0030	.0005
346.000		.0131	.0105	.0105	.0118	9.9990	9.9990	.0005	.0005	-.0020	.0030	.0004
360.000	.0105	.0496	.0483	.0446	.0521	9.9990	9.9990	.0395	.0446	.0320	.0030	.0004

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A069) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 80.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 71.880 BETA = .00000 Q(PSI) = 10.259 PO = 28.018 P = 3.8240

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2059	-.2167	-.2178	-.2235	-.2084	9.9990	9.9990	-.1793	-.2174	-.2136	-.2119	-.2134
14.000		-.2167	-.2170	-.2231	-.2103	9.9990	9.9990	-.2069	-.2167	-.2136	-.2129	-.2129
24.000									-.2168	-.2148	-.2119	-.2112
45.000	-.2046	-.2136	-.2167	-.2201	-.1963	-.1635	-.1993	-.2118	-.2148	-.2136	-.2120	-.2116
67.500		-.2170	-.2197	-.2204	-.1880	-.1676	-.2038	-.2140	-.2140	-.2148	-.2132	-.2121
90.000	-.0605	-.0713	-.1105	-.1294	-.1444	-.1263	-.1226	-.1316	-.1456	-.1531	-.1776	-.2123
112.500		.3369	.2966	.2611	.2102	.2491	.2408	.2242	.2212	.2095	.1589	-.1787
135.000	.8392	.9100	.8708	.8353	.7825	.8157	.7938	.7799	.7444	.6980	.5918	.0123
157.500		1.4122	1.4277	1.3591	1.3094	1.2928	1.2909	1.2728	1.2478	1.1696	1.0551	.2109
180.000	1.4780	1.6192	1.6460	1.5864	1.5453	1.5012	1.4941	1.4718	1.4074	1.3614	1.2371	.3056
202.500		1.4274	1.4421	1.3799	1.3425	1.2909	1.2788	1.2558	1.2023	1.1560	1.0368	.1956
225.000	.8931	.9156	.8986	.8481	.8138	.8002	.7709	.7633	.7215	.6876	.5871	.0183
247.500		.3323	.3007	.2649	.2337	.2190	.2205	.2178	.1862	.1565	.1073	-.1750
270.000	-.0431	-.0653	-.0883	-.1105	-.1346	-.1414	-.1384	-.1399	-.1459	-.1565	-.1812	-.2106
292.500		-.2179	-.2194	-.2198	-.1859	-.1610	-.1927	-.2130	-.2134	-.2149	-.2138	-.2112
315.000	-.2066	-.2157	-.2195	-.2221	-.1950	-.1694	-.2022	-.2127	-.2165	-.2150	-.2135	-.2124
325.000									9.9990	-.2075	-.2147	-.2125
346.000		-.2179	-.2181	-.2240	-.2085	9.9990	9.9990	-.2040	-.2179	-.2142	-.2145	-.2138
360.000	-.2059	-.2167	-.2178	-.2235	-.2084	9.9990	9.9990	-.1793	-.2174	-.2136	-.2119	-.2134

MACH (2) = 3.480 ALPHA (1) = 71.880 BETA = .00000 Q(PSI) = 6.8640 PO = 60.027 P = .81000

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0458	-.0430	-.0435	-.0458	-.0435	9.9990	9.9990	-.0362	-.0497	-.0537	-.0582	-.0582
14.000		-.0452	-.0452	-.0475	-.0458	9.9990	9.9990	-.0463	-.0542	-.0537	-.0576	-.0593
24.000									-.0588	-.0576	-.0582	-.0593
45.000	-.0452	-.0447	-.0452	-.0464	-.0447	.0296	-.0159	-.0441	-.0548	-.0548	-.0582	-.0576
67.500		-.0525	-.0554	-.0531	-.0446	-.0334	-.0559	-.0582	-.0649	-.0649	-.0672	-.0576
90.000	.1069	.0421	.0499	.0319	.0280	.0499	.0545	.0578	.0471	.0437	.0257	-.0695
112.500		.4222	.3776	.3404	.3156	.3619	.3579	.3568	.3590	.3568	.3231	.0200
135.000	.9378	.9800	.9101	.8847	.8436	.8898	.8752	.8729	.8582	.8301	.7502	.1800
157.500		1.5447	1.5114	1.4370	1.3976	1.3959	1.3931	1.3997	1.3683	1.3362	1.2376	.3493
180.000	1.6613	1.7920	1.7672	1.6851	1.6421	1.6241	1.6061	1.6004	1.5740	1.5475	1.4382	.4494
202.500		1.5633	1.5238	1.4494	1.4117	1.3869	1.3756	1.3706	1.3429	1.3142	1.2151	.3446

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A069)

MACH (2) = 3.480 ALPHA (1) = 71.880

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.0020	.9959	.9463	.8832	.8652	.8657	.8443	.8488	.8364	.8190	.7406	.1862
247.500		.4291	.3902	.3468	.3417	.3400	.3367	.3508	.3333	.3130	.2696	.0414
270.000	.1209	.0934	.0736	.0522	.0494	.0483	.0454	.0578	.0539	.0477	.0341	-.0627
292.500		-.0480	-.0497	-.0542	-.0424	-.0210	-.0570	-.0407	-.0610	-.0616	-.0537	-.0593
315.000	-.0452	-.0469	-.0458	-.0497	-.0446	-.0362	-.0520	-.0514	-.0576	-.0576	-.0554	-.0582
326.000									9.9990	-.0126	-.0548	-.0593
346.000		-.0469	-.0458	-.0497	-.0446	9.9990	9.9990	-.0514	-.0570	-.0570	-.0559	-.0588
360.000	-.0458	-.0430	-.0435	-.0458	-.0435	9.9990	9.9990	-.0362	-.0497	-.0537	-.0583	-.0592

MACH (3) = 4.960 ALPHA (1) = 71.880 BETA = .00000 Q(PSI) = 3.0710 PO = 90.037 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0124	.0666	.0703	.0615	.0666	9.9990	9.9990	.0678	.0640	.0540	.0036	.0023
14.000		.0502	.0527	.0477	.0527	9.9990	9.9990	.0615	.0363	.0351	.0036	.0023
24.000									.0036	.0036	.0036	.0036
45.000	.0124	.0426	.0438	.0464	.0426	.2213	.1156	.0652	.0313	.0287	.0011	.0011
67.500		.0351	.0313	.0326	.0401	.0477	.0439	.0527	.0237	.0225	-.0039	.0011
90.000	.1547	.1270	.1063	.0792	.0804	.0993	.1006	.1132	.0943	.0918	.0704	-.0051
112.500		.4507	.3953	.3575	.3386	.3802	.3789	.3852	.3752	.3752	.3891	.0817
135.000	.9762	1.0099	.9205	.8928	.8613	.8878	.8840	.8827	.8550	.8336	.7608	.2316
157.500		1.6036	1.5545	1.4701	1.4184	1.4071	1.3983	1.3970	1.3706	1.3454	1.2543	.4054
180.000	1.7410	1.8589	1.8299	1.7254	1.6624	1.6473	1.6044	1.6095	1.5843	1.5629	1.4613	.5076
202.500		1.6099	1.5658	1.4726	1.4159	1.3958	1.3706	1.3769	1.3466	1.3227	1.2295	.4042
225.000	1.0339	1.0178	.9624	.8843	.8742	.8691	.8465	.8591	.8402	.8301	.7532	.2430
247.500		.4597	.4181	.3677	.3879	.3728	.3614	.3891	.3652	.3450	.2934	.1737
270.000	.1636	.1409	.1233	.0968	.1082	.1031	.0956	.1208	.1082	.1019	.0830	.0137
292.500		.0200	.0212	.0124	.0263	.0237	.0085	.0842	.0111	.0061	.0149	.0023
315.000	.0162	.0162	.0212	.0124	.0187	.0149	.0074	.0905	.0049	.0049	.0061	.0023
326.000									9.9990	.1145	.0074	.0023
346.000		.0162	.0187	.0112	.0149	9.9990	9.9990	.0250	.0036	.0036	.0049	-.0001
360.000	.0124	.0666	.0703	.0615	.0666	9.9990	9.9990	.0678	.0640	.0540	.0036	.0023

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A070) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 80.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 74.860 BETA = .00000 Q(PSI) = 10.246 PO = 28.022 P = 3.8090

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2121	-.2215	-.2234	-.2268	-.2106	9.9990	9.9990	-.2004	-.2166	-.2155	-.2166	-.2181
14.000		-.2211	-.2226	-.2264	-.2113	9.9990	9.9990	-.2008	-.2170	-.2158	-.2166	-.2162
24.000									-.2166	-.2155	-.2165	-.2161
45.000	-.2094	-.2171	-.2224	-.2216	-.1982	-.1722	-.2027	-.2069	-.2156	-.2148	-.2161	-.2165
67.500		-.2220	-.2277	-.2220	-.1926	-.1772	-.2111	-.2104	-.2183	-.2187	-.2170	-.2155
90.000	-.0824	-.0843	-.1119	-.1312	-.1398	-.1221	-.1198	-.1255	-.1417	-.1519	-.1758	-.2151
112.500		.3119	.2933	.2627	.2200	.2593	.2519	.2355	.2306	.2166	.1631	-.1449
135.000	.7878	.8810	.8625	.8519	.8036	.8351	.8191	.8074	.7685	.7205	.6181	.0787
157.500		1.3908	1.4210	1.3938	1.3447	1.3303	1.3265	1.3125	1.2623	1.2161	1.0981	.3037
180.000	1.4176	1.6060	1.6465	1.6253	1.5807	1.5482	1.5339	1.5146	1.4466	1.4035	1.2790	.3985
202.500		1.4056	1.4397	1.4071	1.3678	1.3201	1.3228	1.3046	1.2282	1.1854	1.0723	.2812
225.000	.8399	.8880	.8932	.8612	.8381	.8193	.7985	.7906	.7434	.7087	.6124	.0829
247.500		.3102	.2989	.2694	.2472	.2347	.2325	.2283	.1982	.1657	.1118	-.1404
270.000	-.0680	-.0775	-.0907	-.1107	-.1311	-.1352	-.1360	-.1367	-.1428	-.1534	-.1800	-.2136
292.500		-.2204	-.2230	-.2200	-.1894	-.1652	-.2011	-.2113	-.2125	-.2140	-.2157	-.2142
315.000	-.2117	-.2182	-.2239	-.2224	-.1967	-.1751	-.2076	-.2122	-.2144	-.2156	-.2157	-.2161
326.000									9.9990	-.2070	-.2174	-.2163
346.000		-.2206	-.2233	-.2255	-.2081	9.9990	9.9990	-.2078	-.2149	-.2146	-.2154	-.2162
360.000	-.2121	-.2215	-.2234	-.2268	-.2106	9.9990	9.9990	-.2004	-.2166	-.2155	-.2166	-.2181

MACH (2) = 3.480 ALPHA (1) = 74.860 BETA = .00000 Q(PSI) = 6.8630 PO = 60.021 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0452	-.0418	-.0412	-.0457	-.0446	9.9990	9.9990	-.0480	-.0497	-.0531	-.0582	-.0582
14.000		-.0446	-.0441	-.0475	-.0446	9.9990	9.9990	-.0492	-.0542	-.0542	-.0582	-.0587
24.000									-.0565	-.0570	-.0587	-.0593
45.000	-.0458	-.0458	-.0452	-.0469	-.0435	.0297	-.0227	-.0486	-.0559	-.0559	-.0599	-.0599
67.500		-.0559	-.0548	-.0537	-.0441	-.0334	-.0565	-.0475	-.0655	-.0644	-.0644	-.0593
90.000	.0883	.0742	.0466	.0330	.0330	.0539	.0590	.0590	.0471	.0437	.0218	-.0678
112.500		.4051	.3780	.3487	.3261	.3757	.3724	.3662	.3667	.3500	.3239	.0342
135.000	.8876	.9591	.9174	.9073	.8701	.9197	.9067	.8988	.8791	.8487	.7624	.2185
157.500		1.5224	1.5298	1.4740	1.4366	1.4397	1.4369	1.4290	1.4035	1.3716	1.2675	.4186
180.000	1.6023	1.7731	1.7872	1.7308	1.6936	1.6733	1.6598	1.6513	1.6226	1.5916	1.4788	.5285
202.500		1.5413	1.5430	1.4889	1.4551	1.4303	1.4224	1.4123	1.3824	1.3508	1.2466	.4107

MACH (2) = 3.480 ALPHA (1) = 74.860

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8512	.9749	.9588	.9087	.8949	.8977	.8752	.8740	.8577	.8363	.7534	.2238
247.500		.4135	.3921	.3577	.3560	.3538	.3498	.3600	.3391	.3154	.2703	.0578
270.000	.1041	.0837	.0719	.0538	.0521	.0504	.0493	.0578	.0533	.0437	.0297	-.0559
292.500		-.0514	-.0497	-.0531	-.0413	-.0312	-.0537	-.0554	-.0605	-.0599	-.0525	-.0576
315.000	-.0458	-.0475	-.0469	-.0508	-.0458	-.0430	-.0514	-.0554	-.0593	-.0599	-.0548	-.0582
326.000									9.9990	-.0204	-.0537	-.0582
346.000		-.0497	-.0469	-.0497	-.0463	9.9990	9.9990	-.0548	-.0576	-.0582	-.0542	-.0576
360.000	-.0452	-.0418	-.0412	-.0457	-.0446	9.9990	9.9990	-.0480	-.0497	-.0531	-.0582	-.0582

MACH (3) = 4.960 ALPHA (1) = 74.860 BETA = .00000 Q(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.6920	.9230	.9540
THETA												
.000	.0124	.0566	.0604	.0503	.0553	9.9990	9.9990	.0591	.0503	.0415	.0036	.0036
14.000		.0427	.0465	.0402	.0440	9.9990	9.9990	.0541	.0314	.0276	.0061	.0023
24.000									.0049	.0061	.0036	.0036
45.000	.0137	.0376	.0401	.0414	.0414	.2253	.1107	.0603	.0313	.0275	.0036	.0011
67.500		.0275	.0301	.0263	.0301	.0427	.0376	.0616	.0187	.0187	-.0039	.0023
90.000	.1384	.1195	.0956	.0817	.0868	.1006	.1082	.1183	.0956	.0905	.0679	-.0013
112.500		.4320	.3979	.3677	.3501	.3967	.3954	.3979	.3841	.3791	.3853	.0981
135.000	.9233	.9901	.9296	.9208	.8969	.9271	.9208	.9195	.8830	.8553	.7772	.2745
157.500		1.5805	1.5692	1.5087	1.4772	1.4609	1.4558	1.4520	1.4180	1.3891	1.2887	.4798
180.000	1.6767	1.8400	1.8500	1.7896	1.7354	1.7077	1.6775	1.6788	1.6372	1.6145	1.5079	.5907
202.500		1.5956	1.6032	1.5364	1.4860	1.4596	1.4344	1.4344	1.3878	1.3588	1.2647	.4761
225.000	.9850	1.0102	.9926	.9334	.9271	.9158	.8906	.8943	.8666	.8490	.7658	.2858
247.500		.4534	.4307	.3904	.4055	.3929	.3928	.4017	.3715	.3476	.2934	.1838
270.000	.1810	.1372	.1283	.1031	.1170	.1094	.1006	.1233	.1084	.1006	.0893	.0162
292.500		.0175	.0187	.0112	.0225	.0175	.0081	.0250	.0099	.0074	.0212	.0023
315.000	.0149	.0149	.0200	.0124	.0175	.0149	.0086	.0263	.0061	.0049	.0124	.0023
326.000									9.9990	.1094	.0124	.0023
346.000		.0162	.0187	.0137	.0200	9.9990	9.9990	.0313	.0074	.0074	.0036	.0011
360.000	.0124	.0566	.0604	.0503	.0553	9.9990	9.9990	.0591	.0503	.0415	.0036	.0036

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A071) (18 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1088.4000 IN, XT
LREF = 324.0000 INCHES YMRP = .0000 IN, YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN, ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 80.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.980 ALPHA (1) = 77.860 BETA = .00000 Q(PSI) = 10.263 PO = 28.013 P = 3.8190

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2137	-.2231	-.2265	-.2287	-.2092	9.9990	9.9990	-.2104	-.2175	-.2197	-.2224	-.2202
14.000		-.2231	-.2257	-.2283	-.2100	9.9990	9.9990	-.2077	-.2193	-.2205	-.2215	-.2204
24.000									-.2175	-.2193	-.2207	-.2200
45.000	-.2106	-.2153	-.2202	-.2180	-.1934	-.1696	-.2010	-.2040	-.2127	-.2149	-.2213	-.2198
67.500		-.2221	-.2285	-.2194	-.1916	-.1795	-.2123	-.2081	-.2179	-.2198	-.2188	-.2169
90.000	-.1025	-.0952	-.1137	-.1322	-.1379	-.1171	-.1167	-.1232	-.1405	-.1503	-.1761	-.2215
112.500		.2890	.2860	.2652	.2320	.2694	.2637	.2441	.2380	.2229	.1730	-.0937
135.000	.7362	.8542	.8599	.8640	.8229	.8584	.8437	.8312	.7859	.7391	.6417	.1626
157.500		1.3593	1.4208	1.4144	1.3759	1.3631	1.3585	1.3457	1.2982	1.2525	1.1401	.4081
180.000	1.3537	1.5739	1.6517	1.6517	1.6154	1.5875	1.5663	1.5557	1.4972	1.4560	1.3334	.5071
202.500		1.3672	1.4404	1.4332	1.4015	1.3559	1.3551	1.3347	1.2672	1.2257	1.1178	.3824
225.000	.7831	.8611	.8906	.8747	.8596	.8441	.8260	.8139	.7648	.7315	.6374	.1599
247.500		.2880	.2933	.2706	.2559	.2431	.2424	.2363	.2012	.1692	.1194	-.0933
270.000	-.0882	-.0891	-.0959	-.1129	-.1280	-.1325	-.1329	-.1355	-.1423	-.1555	-.1781	-.2189
292.500		-.2200	-.2241	-.2200	-.1886	-.1678	-.2052	-.2090	-.2120	-.2162	-.2173	-.2158
315.000	-.2137	-.2194	-.2258	-.2232	-.1945	-.1779	-.2100	-.2104	-.2141	-.2187	-.2209	-.2187
326.000									9.9990	-.2134	-.2211	-.2181
346.000		-.2231	-.2253	-.2272	-.2069	9.9990	9.9990	-.2114	-.2159	-.2212	-.2226	-.2196
360.000	-.2137	-.2271	-.2265	-.2287	-.2092	9.9990	9.9990	-.2104	-.2175	-.2197	-.2224	-.2202

MACH (2) = 3.480 ALPHA (1) = 77.880 BETA = .00000 Q(PSI) = 6.8620 PO = 60.013 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0458	-.0423	-.0412	-.0451	-.0423	9.9990	9.9990	-.0423	-.0479	-.0496	-.0565	-.0565
14.000		-.0452	-.0452	-.0480	-.0435	9.9990	9.9990	-.0452	-.0520	-.0525	-.0570	-.0576
24.000									-.0548	-.0554	-.0565	-.0570
45.000	-.0463	-.0458	-.0469	-.0475	-.0435	.0280	-.0232	-.0446	-.0542	-.0554	-.0570	-.0582
67.500		-.0570	-.0554	-.0537	-.0435	-.0384	-.0548	-.0430	-.0638	-.0638	-.0621	-.0576
90.000	.0725	.0669	.0454	.0353	.0387	.0578	.0635	.0646	.0477	.0404	.0189	-.0570
112.500		.3859	.3769	.3555	.3374	.3870	.3848	.3786	.3729	.3639	.3278	.0652
135.000	.8329	.9349	.9191	.9248	.8949	.9479	.9343	.9293	.9028	.8673	.7793	.2816
157.500		1.4934	1.5379	1.5047	1.4765	1.4810	1.4770	1.4720	1.4438	1.4100	1.3035	.5195
180.000	1.5335	1.7426	1.7973	1.7646	1.7331	1.7161	1.7020	1.6970	1.6654	1.6344	1.5239	.6333
202.500		1.5098	1.5493	1.5183	1.4924	1.4681	1.4602	1.4518	1.4197	1.3870	1.2821	.5020

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A071)

MACH (2) = 3.480 ALPHA (1) = 77.880

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8949	.9484	.9803	.9253	.9214	.9242	.9022	.9028	.8780	.8549	.7686	.2827
247.500		.3955	.3921	.3656	.3695	.3639	.3628	.3735	.3442	.3183	.2687	.0849
270.000	.0855	.0748	.0702	.0556	.0567	.0545	.0539	.0635	.0533	.0421	.0268	-.0452
292.500		-.0542	-.0508	-.0542	-.0413	-.0334	-.0531	-.0458	-.0576	-.0587	-.0492	-.0548
315.000	-.0446	-.0469	-.0467	-.0503	-.0446	-.0441	-.0497	-.0413	-.0565	-.0565	-.0525	-.0565
326.000									9.9990	-.0193	-.0554	-.0565
346.000		-.0480	-.0480	-.0514	-.0480	9.9990	9.9990	-.0401	-.0576	-.0582	-.0548	-.0565
360.000	-.0458	-.0423	-.0412	-.0451	-.0423	9.9990	9.9990	-.0423	-.0479	-.0496	-.0565	-.0565

MACH (3) = 4.960 ALPHA (1) = 77.880 BETA = .00000 Q(PSI) = 3.0710 PO = 90.044 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0175	.0602	.0615	.0552	.0589	9.9990	9.9990	.0539	.0527	.0426	.0011	-.0001
14.000		.0464	.0501	.0438	.0476	9.9990	9.9990	.0464	.0338	.0313	-.0001	-.0001
24.000									.0049	.0049	-.0001	-.0001
45.000	.0137	.0388	.0401	.0428	.0401	.2189	.0980	.0338	.0275	.0250	-.0013	-.0039
67.500		.0288	.0275	.0263	.0351	.0401	.0376	.0263	.0162	.0149	-.0089	-.0026
90.000	.1208	.1119	.0943	.0817	.0855	.1031	.1081	.1081	.0880	.0817	.0603	.0011
112.500		.4180	.3966	.3752	.3626	.4041	.4054	.3953	.3840	.3739	.3954	.1145
135.000	.8754	.9684	.9319	.9419	.9167	.9419	.9394	.9256	.8916	.8613	.7847	.3211
157.500		1.5561	1.5801	1.5410	1.4995	1.4831	1.4718	1.4630	1.4327	1.4025	1.3088	.5592
180.000	1.6150	1.8110	1.8576	1.8060	1.7480	1.7291	1.6901	1.6888	1.6536	1.6309	1.5356	.6663
202.500		1.5566	1.5906	1.5415	1.4898	1.4672	1.4432	1.4407	1.4017	1.3765	1.2870	.5490
225.000	.9246	.9696	.9759	.9256	.9281	.9193	.8941	.8941	.8701	.8500	.7732	.3285
247.500		.4282	.4168	.3853	.4080	.3929	.3853	.3979	.3715	.3425	.2983	.2064
270.000	.1321	.1220	.1208	.0981	.1107	.1044	.1019	.1157	.1006	.0918	.0930	.0238
292.500		.0149	.0200	.0124	.0250	.0175	.0099	.0263	.0074	.0049	.0225	.0023
315.000	.0162	.0175	.0200	.0137	.0187	.0149	.0099	.0137	.0023	.0023	.0124	-.0001
326.000									9.9990	.0099	.0049	.0011
346.000		.0137	.0162	.0099	.0149	9.9990	9.9990	.0086	-.0001	-.0026	.0036	-.0026
360.000	.0175	.0602	.0615	.0552	.0589	9.9990	9.9990	.0539	.0527	.0426	.0011	-.0001

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A072) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 79.930 BETA = .00000 Q(PSI) = 10.218 PO = 28.022 P = 3.7790

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2108	-.2162	-.2208	-.2211	-.1988	9.9990	9.9990	-.1920	-.2208	-.2295	-.2293	-.2274
14.000		-.2180	-.2210	-.2222	-.2013	9.9990	9.9990	-.2157	-.2229	-.2301	-.2304	-.2285
24.000									-.2240	-.2289	-.2300	-.2285
45.000	-.2081	-.2149	-.2213	-.2164	-.1910	-.1770	-.2035	-.2153	-.2210	-.2251	-.2276	-.2245
67.500		-.2171	-.2236	-.2137	-.1830	-.1804	-.2126	-.2164	-.2209	-.2254	-.2261	-.2220
90.000	-.1155	-.1010	-.1192	-.1324	-.1362	-.1165	-.1139	-.1245	-.1404	-.1499	-.1726	-.2332
112.500		.2711	.2741	.2658	.2336	.2722	.2696	.2442	.2412	.2298	.1831	-.0592
135.000	.6944	.8266	.8501	.8645	.8335	.8683	.8490	.8403	.8009	.7569	.6637	.2175
157.500		1.3245	1.4112	1.4105	1.3923	1.3847	1.3756	1.3540	1.3166	1.2742	1.1625	.4775
180.000	1.3084	1.5361	1.6305	1.6411	1.6301	1.6104	1.5907	1.5680	1.5153	1.4694	1.3530	.5816
202.500		1.3404	1.4248	1.4263	1.4116	1.3786	1.3627	1.3548	1.2965	1.2458	1.1329	.4490
225.000	.7467	.8390	.8837	.8738	.8651	.8564	.8314	.8250	.7852	.7511	.6582	.2157
247.500		.2770	.2861	.2721	.2627	.2490	.2528	.2449	.2074	.1779	.1309	-.0558
270.000	-.1000	-.0949	-.0998	-.1112	-.1248	-.1290	-.1256	-.1324	-.1426	-.1521	-.1752	-.2270
292.500		-.2158	-.2215	-.2150	-.1798	-.1628	-.2078	-.2112	-.2188	-.2237	-.2232	-.2179
315.000	-.2104	-.2165	-.2233	-.2191	-.1881	-.1783	-.2123	-.2146	-.2233	-.2278	-.2268	-.2226
326.000									9.9990	-.2207	-.2284	-.2250
346.000		-.2183	-.2228	-.2224	-.1978	9.9990	9.9990	-.2156	-.2258	-.2319	-.2286	-.2252
360.000	-.2108	-.2162	-.2208	-.2211	-.1988	9.9990	9.9990	-.1920	-.2208	-.2295	-.2293	-.2274

MACH (2) = 3.480 ALPHA (1) = 79.930 BETA = .00000 Q(PSI) = 6.8610 PO = 60.009 P = .80900

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0492	-.0429	-.0418	-.0457	-.0441	9.9990	9.9990	-.0474	-.0480	-.0514	-.0587	-.0593
14.000		-.0463	-.0457	-.0480	-.0452	9.9990	9.9990	-.0486	-.0548	-.0548	-.0582	-.0582
24.000									-.0565	-.0565	-.0587	-.0593
45.000	-.0492	-.0480	-.0463	-.0486	-.0469	.0268	-.0283	-.0537	-.0554	-.0565	-.0587	-.0599
67.500		-.0599	-.0570	-.0554	-.0475	-.0435	-.0576	-.0632	-.0655	-.0638	-.0621	-.0587
90.000	.0596	.0590	.0421	.0354	.0376	.0596	.0624	.0596	.0455	.0376	.0162	-.0469
112.500		.3712	.3712	.3583	.3431	.3904	.3881	.3763	.3718	.3808	.3261	.0877
135.000	.7923	.9129	.9157	.9326	.9084	.9580	.9496	.9349	.9107	.8757	.7990	.3318
157.500		1.4687	1.5375	1.5200	1.4941	1.4963	1.5053	1.4890	1.4625	1.4298	1.3284	.5891
180.000	1.4856	1.7195	1.7990	1.7855	1.7533	1.7398	1.7342	1.7246	1.6896	1.6586	1.5538	.7094
202.500		1.4862	1.5510	1.5397	1.5093	1.4918	1.4901	1.4755	1.4366	1.4044	1.3058	.5691

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A072)

MACH (2) = 3.480 ALPHA (1) = 79.930

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8564	.9281	.9608	.9366	.9326	.9428	.9253	.9152	.8859	.8622	.7797	.3275
247.500		.3831	.3881	.3679	.3729	.3735	.3718	.3729	.3442	.3137	.2698	.1029
270.000	.0731	.0686	.0669	.0545	.0585	.0573	.0573	.0596	.0506	.0404	.0251	-.0345
292.500		-.0570	-.0525	-.0548	-.0446	-.0418	-.0559	-.0497	-.0593	-.0576	-.0514	-.0565
315.000	-.0492	-.0497	-.0503	-.0525	-.0463	-.0480	-.0525	-.0537	-.0582	-.0587	-.0548	-.0576
326.000									9.9990	-.0244	-.0554	-.0565
346.000		-.0497	-.0497	-.0520	-.0486	9.9990	9.9990	-.0554	-.0582	-.0587	-.0542	-.0581
360.000	-.0492	-.0429	-.0418	-.0457	-.0441	9.9990	9.9990	-.0474	-.0480	-.0514	-.0587	-.0593

MACH (3) = 4.960 ALPHA (1) = 79.930 BETA = .00000 Q(PSI) = 3.0700 PO = 90.029 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0111	.0578	.0603	.0515	.0540	9.9990	9.9990	.0502	.0502	.0401	.0011	-.0001
14.000		.0427	.0464	.0401	.0439	9.9990	9.9990	.0464	.0288	.0275	-.0013	-.0051
24.000									.0049	.0036	.0000	.0000
45.000	.0111	.0376	.0364	.0401	.0389	.2178	.0893	.0326	.0263	.0212	.0011	-.0001
67.500		.0250	.0301	.0275	.0301	.0389	.0364	.0238	.0149	.0149	-.0076	-.0026
90.000	.1121	.1069	.0893	.0792	.0880	.1057	.1120	.1082	.0893	.0830	.0590	.0086
112.500		.4055	.3954	.3765	.3677	.4181	.4168	.4042	.3891	.3791	.3903	.1207
135.000	.8339	.9495	.9432	.9570	.9281	.9822	.9696	.9482	.9130	.8764	.7996	.3752
157.500		1.5402	1.6044	1.5717	1.5490	1.5452	1.5301	1.4986	1.4672	1.4369	1.3462	.6428
180.000	1.5810	1.8123	1.8803	1.8589	1.8337	1.7909	1.7732	1.7254	1.7014	1.6737	1.5772	.7709
202.500		1.5658	1.6238	1.6062	1.5810	1.5306	1.5192	1.4840	1.4462	1.4159	1.3189	.6235
225.000	.9037	.9759	1.0112	.9797	.9822	.9646	.9382	.9268	.8916	.8727	.7923	.3803
247.500		.4320	.4383	.4118	.4269	.4131	.4005	.4105	.3791	.3476	.2908	.2215
270.000	.1232	.1246	.1298	.1082	.1183	.1132	.1069	.1183	.1019	.0918	.0792	.0326
292.500		.0137	.0175	.0086	.0225	.0162	.0061	.0137	.0074	.0011	.0175	.0036
315.000	.0137	.0149	.0162	.0112	.0175	.0137	.0086	.0112	.0036	.0036	.0099	.0049
326.000									9.9990	.0943	.0035	.0011
346.000		.0111	.0149	.0074	.0137	9.9990	9.9990	.0074	.0011	-.0001	.0099	.0023
360.000	.0111	.0578	.0603	.0515	.0540	9.9990	9.9990	.0502	.0502	.0401	.0011	-.0001

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A073) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 81.830 BETA = .00000 Q(PSI) = 10.194 PO = 28.015 P = 3.7560

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2122	-.2160	-.2210	-.2198	-.1932	9.9990	9.9990	-.2126	-.2259	-.2312	-.2288	-.2266
14.000		-.2164	-.2214	-.2198	-.1948	9.9990	9.9990	-.2130	-.2244	-.2297	-.2286	-.2263
24.000									-.2266	-.2290	-.2292	-.2262
45.000	-.2089	-.2150	-.2203	-.2150	-.1868	-.1713	-.2017	-.2138	-.2222	-.2260	-.2253	-.2215
67.500		-.2178	-.2235	-.2140	-.1772	-.1802	-.2121	-.2151	-.2212	-.2257	-.2230	-.2158
90.000	-.1888	-.1082	-.1204	-.1348	-.1382	-.1135	-.1105	-.1223	-.1371	-.1454	-.1690	-.2224
112.500		.2548	.2696	.2628	.2362	.2780	.2746	.2487	.2499	.2385	.1914	-.0247
135.000	.6604	.8017	.8336	.8629	.8431	.8742	.8591	.8492	.8104	.7679	.6784	.2731
157.500		1.2954	1.3877	1.4132	1.4064	1.3931	1.3893	1.3760	1.3334	1.2947	1.1897	.5519
180.000	1.2635	1.5070	1.6218	1.6529	1.6335	1.6294	1.6077	1.5849	1.5443	1.5048	1.3920	.6703
202.500		1.3102	1.4090	1.4352	1.4234	1.3927	1.3835	1.3680	1.3133	1.2711	1.1628	.5377
225.000	.7097	.8154	.8727	.8735	.8746	.8610	.8427	.8374	.7914	.7580	.6753	.2745
247.500		.2620	.2833	.2696	.2643	.2533	.2559	.2518	.2153	.1853	.1373	-.0232
270.000	-.1116	-.1018	-.1003	-.1121	-.1220	-.1258	-.1220	-.1273	-.1372	-.1474	-.1718	-.2112
292.500		-.2145	-.2194	-.2145	-.1761	-.1602	-.2118	-.2095	-.2194	-.2243	-.2235	-.2163
315.000	-.2114	-.2142	-.2222	-.2165	-.1827	-.1795	-.2119	-.2119	-.2226	-.2271	-.2245	-.2219
326.000									9.9990	-.2200	-.2256	-.2230
346.000		-.2191	-.2236	-.2214	-.1941	9.9990	9.9990	-.2138	-.2297	-.2327	-.2265	-.2239
360.000	-.2122	-.2160	-.2210	-.2198	-.1932	9.9990	9.9990	-.2126	-.2259	-.2312	-.2288	-.2266

MACH (2) = 3.480 ALPHA (1) = 81.830 BETA = .00000 Q(PSI) = 6.8600 PO = 59.998 P = .80900

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0486	-.0423	-.0423	-.0473	-.0445	9.9990	9.9990	-.0440	-.0473	-.0524	-.0565	-.0581
14.000		-.0446	-.0469	-.0497	-.0457	9.9990	9.9990	-.0412	-.0525	-.0548	-.0554	-.0570
24.000									-.0559	-.0559	-.0559	-.0576
45.000	-.0480	-.0474	-.0474	-.0497	-.0480	.0246	-.0294	-.0407	-.0542	-.0553	-.0565	-.0582
67.500		-.0593	-.0559	-.0553	-.0486	-.0435	-.0570	-.0610	-.0621	-.0615	-.0610	-.0593
90.000	.0517	.0540	.0404	.0325	.0387	.0602	.0630	.0596	.0444	.0348	.0156	-.0356
112.500		.3590	.3691	.3579	.3478	.3968	.3946	.3799	.3748	.3635	.3275	.1171
135.000	.7557	.8919	.9055	.9353	.9184	.9714	.9618	.3483	.9212	.8852	.7996	.3859
157.500		1.4349	1.5256	1.5251	1.5076	1.5172	1.5222	1.5048	1.4794	1.4478	1.3504	.6658
180.000	1.4275	1.6818	1.7883	1.7928	1.7708	1.7573	1.7539	1.7398	1.7111	1.6829	1.5848	.7974
202.500		1.4540	1.5425	1.5482	1.5273	1.5081	1.5031	1.4890	1.4569	1.4270	1.3323	.6457

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A073)

MACH (2) = 3.480 ALPHA (1) = 81.830

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8113	.9039	.8548	.8405	.8482	.8818	.9315	.8348	.8888	.8740	.7834	.3814
247.500		.3712	.3848	.3808	.3780	.3763	.3729	.3763	.3478	.3180	.2888	.1895
270.000	.0823	.0641	.0858	.0834	.0890	.0879	.0873	.0813	.0511	.0393	.0257	-.0198
292.500		-.0570	-.0525	-.0559	-.0469	-.0441	-.0559	-.0554	-.0565	-.0570	-.0474	-.0548
315.000	-.0497	-.0491	-.0491	-.0525	-.0491	-.0474	-.0519	-.0531	-.0565	-.0570	-.0525	-.0565
326.000									9.9990	-.0255	-.0537	-.0570
346.000		-.0491	-.0503	-.0536	-.0508	9.9990	9.9990	-.0536	-.0570	-.0593	-.0548	-.0565
360.000	-.0486	-.0423	-.0423	-.0473	-.0445	9.9990	9.9990	-.0440	-.0473	-.0524	-.0565	-.0581

MACH (3) = 4.860 ALPHA (1) = 81.830 BETA = .00000 Q(PSI) = 3.0710 PO = 90.038 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0112	.0653	.0678	.0578	.0603	9.9990	9.9990	.0590	.0615	.0515	.0049	-.0001
14.000		.0488	.0488	.0463	.0488	9.9990	9.9990	.0438	.0375	.0362	.0061	.0023
24.000									.0049	.0061	-.0026	-.0013
45.000	.0149	.0401	.0413	.0428	.0351	.2189	.0879	.0413	.0313	.0288	.0011	-.0013
67.500		.0313	.0300	.0300	.0328	.0428	.0388	.0482	.0212	.0200	-.0013	-.0001
90.000	.1044	.1044	.0905	.0805	.0855	.1069	.1082	.1082	.0905	.0805	.0615	.0212
112.500		.3987	.3967	.3816	.3715	.4194	.4168	.4055	.3916	.3803	.3891	.1611
135.000	.8081	.9397	.9447	.9574	.9473	.9825	.9674	.9548	.9195	.8843	.8087	.4231
157.500		1.5213	1.6019	1.5868	1.5541	1.5364	1.5339	1.5024	1.4747	1.4457	1.3538	.7026
180.000	1.5356	1.7829	1.8745	1.8707	1.8216	1.7838	1.7737	1.7309	1.7007	1.6767	1.5873	.8465
202.500		1.5314	1.6107	1.6007	1.5591	1.5213	1.5075	1.4735	1.4457	1.4168	1.3353	.6953
225.000	.8613	.9473	.9913	.9836	.9674	.9599	.9284	.9221	.8991	.8767	.7983	.4293
247.500		.4143	.4231	.4055	.4168	.4055	.3942	.4080	.3791	.3463	.2909	.2329
270.000	.1120	.1170	.1183	.1006	.1157	.1082	.1031	.1170	.1031	.0880	.0779	.0439
292.500		.0137	.0187	.0099	.0225	.0175	.0061	.0200	.0099	.0074	.0099	.0036
315.000	.0099	.0149	.0149	.0099	.0137	.0099	.0074	.0250	.0036	.0023	.0061	.0011
326.000									9.9990	.0080	.0061	.0023
346.000		.0149	.0124	.0099	.0162	9.9990	9.9990	.0313	.0061	.0011	.0061	.0036
360.000	.0112	.0653	.0678	.0578	.0603	9.9990	9.9990	.0590	.0615	.0515	.0049	-.0001

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A074) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 84.830 BETA = .00000 Q(PSI) = 10.210 PO = 28.020 P = 3.7710

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2130	-.2174	-.2243	-.2201	-.1924	9.9990	9.9990	-.2038	-.2307	-.2307	-.2274	-.2274
14.000		-.2199	-.2267	-.2229	-.1968	9.9990	9.9990	-.2100	-.2324	-.2335	-.2265	-.2253
24.000									-.2308	-.2303	-.2265	-.2234
45.000	-.2102	-.2170	-.2227	-.2170	-.1882	-.1783	-.1992	-.2087	-.2272	-.2280	-.2251	-.2175
67.500		-.2198	-.2243	-.2175	-.1792	-.1784	-.2118	-.2107	-.2273	-.2277	-.2207	-.2139
90.000	-.1440	-.1191	-.1267	-.1362	-.1358	-.1089	-.1096	-.1195	-.1339	-.1427	-.1636	-.1950
112.500		.2288	.2553	.2591	.2387	.2807	.2773	.2500	.2553	.2462	.2125	.0334
135.000	.5967	.7638	.8139	.8633	.8485	.8906	.8747	.8599	.8306	.7931	.7122	.3554
157.500		1.2427	1.3677	1.4131	1.4127	1.4127	1.4154	1.4021	1.3590	1.3219	1.2237	.6649
180.000	1.1836	1.4486	1.5916	1.6511	1.6416	1.6556	1.6219	1.6219	1.5787	1.5468	1.4505	.8001
202.500		1.2558	1.3831	1.4324	1.4264	1.4104	1.4055	1.3866	1.3418	1.3077	1.2185	.6642
225.000	.6460	.7739	.8531	.8709	.8811	.8716	.8580	.8466	.8053	.7758	.7034	.3504
247.500		.2386	.2696	.2666	.2685	.2549	.2602	.2549	.2189	.1890	.1485	.0270
270.000	-.1315	-.1150	-.1089	-.1165	-.1237	-.1271	-.1237	-.1275	-.1377	-.1487	-.1667	-.1841
292.500		-.2166	-.2219	-.2169	-.1806	-.1651	-.2139	-.2064	-.2268	-.2268	-.2227	-.2151
315.000	-.2115	-.2169	-.2237	-.2180	-.1881	-.1847	-.2112	-.2078	-.2294	-.2290	-.2266	-.2217
326.000									9.9990	-.2217	-.2256	-.2215
346.000		-.2188	-.2252	-.2207	-.1945	9.9990	9.9990	-.2066	-.2320	-.2309	-.2272	-.2257
360.000	-.2130	-.2174	-.2243	-.2201	-.1924	9.9990	9.9990	-.2038	-.2307	-.2307	-.2274	-.2274

MACH (2) = 3.480 ALPHA (1) = 84.830 BETA = .00000 Q(PSI) = 6.8630 PO = 60.018 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0497	-.0452	-.0446	-.0491	-.0491	9.9990	9.9990	-.0469	-.0463	-.0508	-.0531	-.0559
14.000		-.0469	-.0486	-.0508	-.0497	9.9990	9.9990	-.0474	-.0497	-.0525	-.0531	-.0565
24.000									-.0537	-.0537	-.0531	-.0559
45.000	-.0497	-.0480	-.0486	-.0503	-.0519	.0258	-.0316	-.0463	-.0508	-.0536	-.0526	-.0548
67.500		-.0599	-.0570	-.0576	-.0582	-.0458	-.0587	-.0604	-.0587	-.0587	-.0554	-.0570
90.000	.0381	.0466	.0387	.0342	.0421	.0629	.0657	.0612	.0466	.0353	.0172	-.0159
112.500		.3391	.3600	.3611	.3571	.4051	.4000	.3842	.3803	.3684	.3346	.1627
135.000	.6984	.8543	.8915	.9405	.9310	.9862	.9749	.9620	.9355	.9011	.8227	.4665
157.500		1.3847	1.5059	1.5329	1.5251	1.5386	1.5431	1.5273	1.5070	1.4777	1.3887	.7810
180.000	1.3458	1.6235	1.7666	1.7988	1.7841	1.7802	1.7757	1.7633	1.7413	1.7182	1.6326	.9333
202.500		1.3999	1.5210	1.5531	1.5379	1.5283	1.5232	1.5097	1.4827	1.4562	1.3729	.7714

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A074)

MACH (2) = 3.480 ALPHA (1) = 84.830

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.7489	.8623	.9407	.9446	.9587	.9860	.9435	.9362	.9125	.8894	.8145	.4623
247.500		.3532	.3769	.3729	.3876	.3836	.3786	.3803	.3521	.3183	.2771	.1672
270.000	.0454	.0567	.0623	.0550	.0629	.0612	.0584	.0629	.0522	.0392	.0240	-.0035
292.500		-.0576	-.0525	-.0570	-.0520	-.0441	-.0559	-.0486	-.0508	-.0531	-.0475	-.0531
315.000	-.0514	-.0503	-.0508	-.0542	-.0537	-.0492	-.0525	-.0469	-.0525	-.0559	-.0531	-.0543
326.000									9.9990	-.0272	-.0542	-.0537
346.000		-.0508	-.0514	-.0542	-.0548	9.9990	9.9990	-.0435	-.0537	-.0565	-.0554	-.0548
360.000	-.0497	-.0452	-.0446	-.0491	-.0491	9.9990	9.9990	-.0469	-.0463	-.0508	-.0531	-.0559

MACH (3) = 4.960 ALPHA (1) = 84.830 BETA = .00000 Q(PSI) = 3.0700 PO = 90.027 = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0124	.0541	.0541	.0440	.0440	9.9990	9.9990	.0478	.0503	.0364	.0061	-.0013
14.000		.0414	.0401	.0364	.0389	9.9990	9.9990	.0414	.0351	.0288	.0074	-.0026
24.000									.0023	.0049	.0061	-.0013
45.000	.0137	.0376	.0338	.0364	.0313	.2165	.0817	.0288	.0301	.0212	.0049	-.0013
67.500		.0225	.0225	.0200	.0187	.0351	.0301	.0212	.0187	.0137	.0011	-.0064
90.000	.0930	.0981	.0905	.0817	.0956	.1082	.1120	.1107	.0931	.0792	.0628	.0338
112.500		.3802	.3903	.3852	.3827	.4268	.4218	.4066	.3966	.3802	.4017	.1989
135.000	.7457	.8981	.9221	.9649	.9498	.9913	.9762	.9636	.9334	.8931	.8213	.4975
157.500		1.4621	1.5742	1.5830	1.5667	1.5553	1.5478	1.5264	1.5012	1.4697	1.3878	.8210
180.000	1.4436	1.7120	1.8418	1.8594	1.8304	1.7964	1.7888	1.7536	1.7309	1.7057	1.6314	.9813
202.500		1.4659	1.5767	1.5969	1.5667	1.5389	1.5251	1.4923	1.4672	1.4445	1.3680	.8112
225.000	.7908	.8994	.9699	.9599	.9636	.9687	.9384	.9296	.9057	.8805	.8124	.4975
247.500		.3942	.4168	.4005	.4282	.4131	.4005	.4105	.3816	.3450	.2921	.2594
270.000	.0956	.1120	.1170	.1019	.1183	.1132	.1044	.1397	.1044	.0893	.0742	.0553
292.500		.0162	.0187	.0086	.0200	.0175	.0061	.0187	.0137	.0049	.0137	.0049
315.000	.0124	.0187	.0162	.0086	.0137	.0137	.0061	.0225	.0099	.0023	.0049	.0049
326.000									9.9990	.0842	.0049	.0023
346.000		.0162	.0124	.0074	.0086	9.9990	9.9990	.0263	.0099	-.0001	.0123	.0023
360.000	.0124	.0541	.0541	.0440	.0440	9.9990	9.9990	.0478	.0503	.0364	.0061	-.0013

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A075) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.970 ALPHA (1) = 87.830 BETA = .00000 Q(PSI) = 10.209 PO = 28.012 P = 3.7720

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2184	-.2228	-.2300	-.2254	-.1963	9.9990	9.9990	-.2058	-.2345	-.2311	-.2268	-.2279
14.000		-.2242	-.2302	-.2257	-.1996	9.9990	9.9990	-.2060	-.2344	-.2314	-.2254	-.2270
24.000									-.2336	-.2296	-.2254	-.2251
45.000	-.2152	-.2223	-.2291	-.2219	-.1936	-.1769	-.1947	-.2045	-.2322	-.2310	-.2231	-.2208
67.500		-.2225	-.2278	-.2188	-.1866	-.1771	-.2025	-.2021	-.2316	-.2282	-.2216	-.2132
90.000	-.1614	-.1333	-.1348	-.1390	-.1333	-.1106	-.1121	-.1216	-.1341	-.1398	-.1574	-.1658
112.500		.2015	.2406	.2546	.2432	.2853	.2792	.2508	.2614	.2553	.2289	.0861
135.000	.5352	.7196	.7878	.8538	.8504	.9004	.8815	.8671	.8470	.8121	.7439	.4356
157.500		1.1844	1.3332	1.4018	1.4105	1.4253	1.4314	1.4230	1.3836	1.3514	1.2720	.7734
180.000	1.0[illegible]76	1.3838	1.5569	1.6415	1.6328	1.6461	1.6393	1.6510	1.5979	1.5736	1.4888	.9149
202.500		1.1969	1.3459	1.4213	1.4270	1.4186	1.4160	1.4058	1.3652	1.3387	1.2670	.7740
225.000	.5755	.7272	.8265	.8614	.8856	.8765	.8663	.8549	.8216	.7977	.7396	.4301
247.500		.2122	.2531	.2614	.2712	2591	.2618	.2542	.2224	.1936	.1637	.0701
270.000	-.1504	-.1276	-.1174	-.1178	-.1208	-.1242	-.1231	-.1299	-.1367	-.1466	-.1591	-.1572
292.500		-.2212	-.2269	-.2189	-.1860	-.1742	-.2057	-.2023	-.2284	-.2261	-.2201	-.2125
315.000	-.2184	-.2216	-.2285	-.2213	-.1925	-.1898	-.2050	-.2053	-.2307	-.2285	-.2231	-.2220
326.000									9.9990	-.2201	-.2258	-.2239
346.000		-.2229	-.2293	-.2237	-.1971	9.9990	9.9990	-.2062	-.2324	-.2286	-.2283	-.2272
360.000	-.2184	-.2229	-.2300	-.2254	-.1963	9.9990	9.9990	-.2058	-.2345	-.2311	-.2268	-.2279

MACH (2) = 3.480 ALPHA (1) = 87.830 BETA = .00000 Q(PSI) = 6.8830 PO = 60.020 P = .81000

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0525	-.0463	-.0446	-.0492	-.0463	9.9990	9.9990	-.0424	-.0458	-.0492	-.0520	-.0531
14.000		-.0497	-.0480	-.0520	-.0492	9.9990	9.9990	-.0452	-.0497	-.0508	-.0525	-.0537
24.000									-.0531	-.0531	-.0525	-.0542
45.000	-.0525	-.0504	-.0509	-.0526	-.0509	.0238	-.0290	-.0464	-.0515	-.0526	-.0531	-.0537
67.500		-.0610	-.0604	-.0604	-.0570	-.0475	-.0576	-.0548	-.0570	-.0570	-.0542	-.0593
90.000	.0229	.0370	.0347	.0336	.0483	.0646	.0669	.0635	.0437	.0353	.0184	.0043
112.500		.3158	.3496	.3598	.3643	.4088	.4043	.3879	.3795	.3716	.3459	.2089
135.000	.6[illegible]35	.8092	.8712	.9400	.9439	.9947	.9845	.9749	.9467	.9163	.8470	.5460
157.500		1.3244	1.4755	1.5307	1.5391	1.5510	1.5572	1.5465	1.5296	1.5070	1.4304	.9000
180.000	1.2690	1.5555	1.7325	1.7962	1.7990	1.7934	1.7922	1.7849	1.7686	1.7528	1.6801	1.0657
202.500		1.3379	1.4890	1.5504	1.5561	1.5380	1.5358	1.5273	1.5019	1.4817	1.4112	.8915

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A075)

MACH (2) = 3.480 ALPHA (1) = 87.830

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6869	.8177	.9214	.9434	.9704	.9744	.9518	.9467	.9214	.9022	.8391	.5370
247.500		.3307	.3650	.3718	.3960	.3859	.3808	.3831	.3493	.3188	.2873	.2027
270.000	.0325	.0477	.0590	.0573	.0686	.0635	.0595	.0663	.0499	.0387	.0285	.0139
292.500		-.0593	-.0554	-.0593	-.0514	-.0458	-.0548	-.0407	-.0497	-.0497	-.0441	-.0565
315.000	-.0520	-.0525	-.0531	-.0554	-.0503	-.0508	-.0503	-.0373	-.0514	-.0525	-.0497	-.0542
326.000									9.9990	-.0260	-.0480	-.0531
345.000		-.0525	-.0531	-.0554	-.0520	9.9990	9.9990	-.0475	-.0531	-.0537	-.0492	-.0525
360.000	-.0525	-.0463	-.0446	-.0492	-.0463	9.9990	9.9990	-.0424	-.0458	-.0492	-.0520	-.0531

MACH (3) = 4.950 ALPHA (1) = 87.830 BETA = .00000 Q(PSI) = 3.0710 PO = 90.044 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0124	.0589	.0665	.0501	.0615	9.9990	9.9990	.0602	.0564	.0451	.0074	.0049
14.000		.0451	.0501	.0388	.0451	9.9990	9.9990	.0526	.0350	.0300	.0061	.0036
24.000									.0049	.0049	.0086	.0061
45.000	.0112	.0388	.0426	.0388	.0400	.2200	.0879	.0577	.0312	.0262	.0036	.0023
67.500		.0275	.0326	.0225	.0300	.0389	.0313	.0578	.0187	.0174	.0011	-.0013
90.000	.0817	.0918	.0930	.0817	.0981	.1107	.1132	.1107	.0867	.0766	.0641	.0490
112.500		.3575	.3852	.3852	.3928	.4306	.4255	.4117	.3903	.3789	.4118	.2442
135.000	.6902	.8573	.9140	.9694	.9656	1.0046	.9870	.9757	.9341	.9001	.8439	.5718
157.500		1.4080	1.5553	1.5868	1.5830	1.5654	1.5604	1.5377	1.5100	1.4873	1.4235	.9284
180.000	1.3605	1.6549	1.8211	1.8614	1.8513	1.8060	1.8009	1.7682	1.7493	1.7304	1.6654	1.1060
202.500		1.4071	1.5532	1.5973	1.5860	1.5432	1.5331	1.5066	1.4802	1.4600	1.4021	.9296
225.000	.7394	.8565	.9548	.9649	.9888	.9750	.9460	.9410	.9120	.8906	.8351	.5743
247.500		.3715	.4118	.4005	.4385	.4168	.4042	.4181	.3791	.3476	.3009	.2883
270.000	.0905	.1019	.1195	.1008	.1271	.1145	.1069	.1233	.0994	.0855	.0842	.0704
292.500		.0112	.0263	.0086	.0225	.0175	.0074	.0263	.0124	.0099	.0225	.0086
315.000	.0187	.0137	.0200	.0074	.0162	.0112	.0074	.0338	.0061	.0036	.0137	.0049
326.000									9.9990	.0817	.0149	.0049
346.000		.0137	.0175	.0074	.0175	9.9990	9.9990	.0401	.0086	.0011	.0137	.0036
360.000	.0124	.0589	.0665	.0501	.0615	9.9990	9.9990	.0602	.0564	.0451	.0074	.0049

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A076) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 89.830 BETA = .00000 Q(PSI) = 10.248 PO = 28.019 P = 3.8120

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2218	-.2275	-.2328	-.2279	-.1969	9.9990	9.9990	-.2113	-.2354	-.2305	-.2259	-.2263
14.000		-.2277	-.2338	-.2277	-.1998	9.9990	9.9990	-.2104	-.2345	-.2307	-.2250	-.2258
24.000									-.2327	-.2273	-.2258	-.2254
45.000	-.2190	-.2275	-.2318	-.2237	-.1981	-.1830	-.1932	-.2060	-.2335	-.2297	-.2221	-.2213
67.500		-.2290	-.2324	-.2226	-.1943	-.1823	-.2004	-.2019	-.2343	-.2290	-.2203	-.2139
90.000	-.1759	-.1475	-.1433	-.1441	-.1358	-.1128	-.1132	-.1249	-.1362	-.1418	-.1532	-.1506
112.500		.1835	.2310	.2513	.2449	.2875	.2823	.2532	.2664	.2613	.2414	.1219
135.000	.4882	.6900	.7723	.8482	.8501	.9044	.8848	.8724	.8539	.8233	.7646	.4879
157.500		1.1432	1.3138	1.3961	1.4143	1.4286	1.4373	1.4313	1.3988	1.3727	1.3056	.8426
180.000	1.0420	1.3314	1.5227	1.6268	1.6445	1.6600	1.6449	1.6578	1.6136	1.5914	1.5196	.9903
202.500		1.1510	1.3205	1.4179	1.4312	1.4213	1.4240	1.4119	1.3809	1.3560	1.2893	.8390
225.000	.5312	.6970	.8097	.8596	.8849	.8812	.8868	.8559	.8302	.8098	.7638	.4790
247.500		.1953	.2438	.2579	.2726	.2584	.2832	.2545	.2239	.1953	.1764	.0982
270.000	-.1618	-.1389	-.1208	-.1231	-.1215	-.1246	-.1238	-.1306	-.1388	-.1468	-.1539	-.1444
292.500		-.2273	-.2284	-.2224	-.1937	-.1783	-.2039	-.2013	-.2318	-.2269	-.2198	-.2114
315.000	-.2208	-.2274	-.2318	-.2244	-.1984	-.1948	-.2037	-.2067	-.2338	-.2297	-.2244	-.2183
326.000									9.9990	-.2213	-.2260	-.2207
346.000		-.2276	-.2329	-.2265	-.1993	9.9990	9.9990	-.2106	-.2340	-.2299	-.2303	-.2254
360.000	-.2218	-.2275	-.2328	-.2279	-.1969	9.9990	9.9990	-.2113	-.2354	-.2305	-.2259	-.2263

MACH (2) = 3.480 ALPHA (1) = 89.830 BETA = .00000 Q(PSI) = 6.8640 PO = 60.028 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0537	-.0446	-.0441	-.0480	-.0457	9.9990	9.9990	-.0356	-.0446	-.0480	-.0531	-.0531
14.000		-.0491	-.0480	-.0508	-.0480	9.9990	9.9990	-.0356	-.0497	-.0503	-.0520	-.0531
24.000									-.0520	-.0508	-.0509	-.0531
45.000	-.0520	-.0503	-.0520	-.0514	-.0503	.0248	-.0311	-.0351	-.0503	-.0525	-.0531	-.0542
67.500		-.0593	-.0593	-.0599	-.0582	-.0480	-.0570	-.0480	-.0559	-.0548	-.0548	-.0644
90.000	.0149	.0308	.0330	.0347	.0505	.0657	.0657	.0691	.0437	.0359	.0217	.0138
112.500		.3045	.3429	.3609	.3693	.4105	.4031	.3941	.3800	.3733	.3508	.2251
135.000	.6035	.7812	.8578	.9378	.9446	.9931	.9857	.9835	.9497	.9221	.8633	.5990
157.500		1.2849	1.4517	1.5261	1.5430	1.5503	1.5683	1.5582	1.5385	1.5165	1.4551	.9762
180.000	1.2010	1.5098	1.7082	1.7934	1.8007	1.8086	1.8063	1.7922	1.7793	1.7669	1.7077	1.1513
202.500		1.2979	1.4658	1.5486	1.5571	1.5537	1.5480	1.5323	1.5080	1.4911	1.4349	.9687

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A076)

MACH (2) = 3.480 ALPHA (1) = 89.830

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8511	.7891	.9057	.9412	.9733	.9848	.9564	.9502	.9232	.8069	.8561	.5891
247.500		.3169	.3592	.3716	.3970	.3902	.3817	.3874	.3474	.3198	.2910	.2257
270.000	.0240	.0426	.0555	.0550	.0698	.0623	.0589	.0713	.0482	.0369	.0325	.0246
292.500		-.0605	-.0554	-.0610	-.0554	-.0447	-.0543	-.0379	-.0503	-.0509	-.0447	-.0571
315.000	-.0526	-.0526	-.0531	-.0548	-.0514	-.0486	-.0497	-.0402	-.0514	-.0526	-.0497	-.0531
326.000									9.9990	-.0277	-.0480	-.0531
346.000		-.0531	-.0548	-.0554	-.0520	9.9990	9.9990	-.0396	-.0526	-.0548	-.0486	-.0526
360.000	-.0537	-.0446	-.0441	-.0480	-.0457	9.9990	9.9990	-.0356	-.0446	-.0480	-.0531	-.0531

MACH (3) = 4.960 ALPHA (1) = 89.830 BETA = .00000 Q(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0112	.0553	.0616	.0477	.0578	9.9990	9.9990	.0566	.0528	.0414	.0061	.0036
14.000		.0401	.0477	.0351	.0401	9.9990	9.9990	.0527	.0313	.0275	.0049	.0011
24.000									.0061	.0049	.0036	-.0001
45.000	.0112	.0351	.0401	.0364	.0364	.2203	.0817	.0578	.0288	.0275	.0036	.0023
67.500		.0250	.0301	.0212	.0301	.0389	.0313	.0578	.0187	.0162	-.0001	-.0064
90.000	.0716	.0855	.0918	.0830	.1019	.1170	.1157	.0943	.0855	.0779	.0641	.0603
112.500		.3438	.3765	.3879	.4017	.4345	.4332	.4118	.3879	.3791	.4105	.2669
135.000	.6537	.8288	.8994	.9699	.9762	1.0140	.9939	.9762	.9347	.9019	.8528	.6209
157.500		1.3680	1.5381	1.5885	1.5961	1.5784	1.5684	1.5432	1.5218	1.5054	1.4512	1.0153
180.000	1.3000	1.6087	1.8065	1.8745	1.8758	1.8292	1.8166	1.7876	1.7825	1.7725	1.7221	1.2080
202.500		1.3718	1.5432	1.6175	1.6225	1.5671	1.5570	1.5444	1.5180	1.4978	1.4474	1.0115
225.000	.7028	.8376	.9586	.9800	1.0203	1.0002	.9724	.9699	.9296	.9057	.8578	.6222
247.500		.3627	.4156	.4105	.4509	.4307	.4181	.4257	.3791	.3476	.3098	.3085
270.000	.0830	.0981	.1220	.1057	.1296	.1195	.1132	.1246	.0981	.0855	.0817	.0767
292.500		.0124	.0225	.0086	.0250	.0149	.0061	.0288	.0112	.0099	.0162	.0049
315.000	.0200	.0149	.0175	.0074	.0175	.0112	.0074	.0187	.0074	.0023	.0162	.0074
326.000									9.9990	.0792	.0137	.0023
346.000		.0124	.0187	.0074	.0137	9.9990	9.9990	.0149	.0049	-.0001	.0162	.0023
360.000	.0112	.0553	.0616	.0477	.0578	9.9990	9.9990	.0566	.0528	.0414	.0061	.0036

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A077) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 91.830 BETA = .00000 Q(PSI) = 10.249 PO = 28.011 P = 3.8160

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2272	-.2302	-.2362	-.2287	-.1974	9.9990	9.9990	-.2140	-.2343	-.2283	-.2306	-.2272
14.000		-.2302	-.2363	-.2291	-.2004	9.9990	9.9990	-.2133	-.2340	-.2287	-.2296	-.2 99
24.000									-.2348	-.2300	-.2269	-.2 51
45.000	-.2251	-.2302	-.2352	-.2261	-.2023	-.1816	-.1910	-.2080	-.2333	-.2295	-.2217	-.2 21
67.500		-.2317	-.2340	-.2241	-.2008	-.1887	-.1959	-.2000	-.2336	-.2279	-.2200	-.2155
90.000	-.1865	-.1549	-.1477	-.1451	-.1353	-.1092	-.1122	-.1232	-.1345	-.1383	-.1478	-.1342
112.500		.1643	.2183	.2462	.2439	.2877	.2809	.2537	.2685	.2670	.2537	.1560
135.000	.4483	.6559	.7507	.8375	.8477	.9044	.8844	.8761	.8625	.8345	.7854	.5408
157.500		1.0990	1.2816	1.3790	1.4122	1.4247	1.4364	1.4315	1.4138	1.3941	1.3370	.9171
180.000	.9849	1.2805	1.4878	1.6101	1.6381	1.6441	1.6528	1.6551	1.6184	1.6064	1.5512	1.0710
202.500		1.1065	1.2868	1.4034	1.4291	1.4193	1.4280	1.4144	1.3925	1.3714	1.3166	.9074
225.000	.4918	.6624	.7866	.8489	.8856	.8822	.8727	.8599	.8418	.8255	.7873	.5301
247.500		.1780	.2316	.2531	.2732	.2618	.2633	.2554	.2271	.2014	.1873	.1300
270.000	-.1753	-.1484	-.1281	-.1247	-.1243	-.1228	-.1254	-.1311	-.1398	-.1454	-.1508	-.1320
292.500		-.2299	-.2310	-.2231	-.1989	-.1865	-.1993	-.1993	-.2310	-.2265	-.2182	-.2099
315.000	-.2253	-.2295	-.2340	-.2253	-.2000	-.1981	-.2015	-.2064	-.2321	-.2295	-.2229	-.2165
326.000									9.9990	-.2217	-.2275	-.2200
346.000		-.2319	-.2364	-.2300	-.2028	9.9990	9.9990	-.2122	-.2360	-.2315	-.2331	-.2248
360.000	-.2272	-.2302	-.2362	-.2287	-.1974	9.9990	9.9990	-.2140	-.2343	-.2283	-.2306	-.2272

MACH (2) = 3.480 ALPHA (1) = 91.850 BETA = .00000 Q(PSI) = 6.8630 PO = 60.023 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0520	-.0441	-.0435	-.0480	-.0474	9.9990	9.9990	-.0378	-.0429	-.0457	-.0508	-.0503
14.000		-.0474	-.0469	-.0514	-.0497	9.9990	9.9990	-.0384	-.0486	-.0491	-.0514	-.0525
24.000									-.0514	-.0525	-.0508	-.0520
45.000	-.0520	-.0480	-.0480	-.0503	-.0497	.0274	-.0300	-.0362	-.0480	-.0486	-.0509	-.0514
67.500		-.0576	-.0570	-.0610	-.0593	-.0458	-.0554	-.0362	-.0537	-.0537	-.0531	-.0632
90.000	.0077	.0262	.0335	.0341	.0488	.0673	.0668	.0657	.0431	.0364	.0251	.0285
112.500		.2899	.3350	.3569	.3699	.4110	.4071	.3891	.3784	.3744	.3594	.2664
135.000	.5626	.7480	.8347	.9294	.9412	.9987	.9857	.9773	.9508	.9271	.8791	.6469
157.500		1.2353	1.4192	1.5118	1.5371	1.5563	1.5625	1.5524	1.5484	1.5360	1.4800	1.0516
180.000	1.1345	1.4517	1.6680	1.7757	1.7971	1.7982	1.7965	1.7926	1.7920	1.7864	1.7407	1.2353
202.500		1.2449	1.4325	1.5334	1.5514	1.5413	1.5407	1.5345	1.5193	1.5075	1.4602	1.0414

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A077)

MACH (2) = 3.480 ALPHA (1) = 91.850

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6085	.7547	.8849	.9333	.9728	.9773	.9553	.9502	.9288	.9153	.8718	.6350
247.500		.3017	.3508	.3699	.3981	.3885	.3846	.3846	.3474	.3226	.2985	.2501
270.000	.0161	.0375	.0556	.0550	.0697	.0635	.0612	.0680	.0488	.0392	.0342	.0364
292.500		-.0576	-.0543	-.0616	-.0548	-.0452	-.0537	-.0374	-.0481	-.0492	-.0441	-.0576
315.000	-.0508	-.0514	-.0520	-.0554	-.0537	-.0492	-.0486	-.0328	-.0503	-.0497	-.0492	-.0520
326.000									9.9990	-.0272	-.0492	-.0514
346.000		-.0520	-.0509	-.0554	-.0531	9.9990	9.9990	-.0407	-.0503	-.0509	-.0497	-.0508
360.000	-.0520	-.0441	-.0435	-.0480	-.0474	9.9990	9.9990	-.0378	-.0429	-.0457	-.0508	-.0503

MACH (3) = 4.380 ALPHA (1) = 91.850 BETA = .00000 Q(PSI) = 3.0710 PO = 90.036 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0137	.0665	.0715	.0614	.0614	9.9990	9.9990	.0816	.0639	.0526	.0099	.0049
14.000		.0526	.0526	.0488	.0514	9.9990	9.9990	.0728	.0426	.0413	.0061	.0049
24.000									.0099	.0112	.0074	.0049
45.000	.0162	.0426	.0439	.0464	.0363	.2215	.0792	.0754	.0351	.0326	.0074	.0036
67.500		.0326	.0351	.0288	.0275	.0427	.0364	.0779	.0250	.0238	.0036	-.0026
90.000	.0679	.0855	.0893	.0893	.1031	.1120	.1132	.1296	.0880	.0792	.0691	.0716
112.500		.3312	.3652	.3904	.4005	.4282	.4269	.4219	.3879	.3828	.4055	.3060
135.000	.6096	.7908	.8701	.9621	.9508	1.0037	.9885	.9873	.9369	.9104	.8666	.6764
157.500		1.3038	1.4890	1.5658	1.5646	1.5709	1.5646	1.5570	1.5230	1.5066	1.4613	1.0909
180.000	1.2194	1.5371	1.7447	1.8342	1.8418	1.8128	1.8040	1.7825	1.7636	1.7586	1.7196	1.2836
202.500		1.3051	1.4802	1.5696	1.5865	1.5482	1.5344	1.5243	1.4890	1.4789	1.4436	1.0821
225.000	.6487	.7910	.9095	.9536	1.0014	.9775	.9447	.9523	.9132	.8969	.8565	.6713
247.500		.3425	.3929	.4042	.4370	.4181	.4042	.4269	.3715	.3450	.3085	.3287
270.000	.0716	.0956	.1170	.1094	.1296	.1183	.1082	.1384	.0994	.0893	.0830	.0868
292.500		.0162	.0250	.0137	.0200	.0200	.0086	.0490	.0162	.0137	.0149	.0086
315.000	.0162	.0187	.0200	.0149	.0187	.0086	.0112	.0590	.0124	.0112	.0137	.0049
326.000									9.9990	.0792	.0099	.0049
346.000		.0149	.0200	.0124	.0124	9.9990	9.9990	.0615	.0099	.0086	.0137	.0049
360.000	.0137	.0665	.0715	.0614	.0614	9.9990	9.9990	.0816	.0639	.0526	.0099	.0049

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A078) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 94.850 BETA = .00000 Q(PSI) = 10.251 PO = 28.014 P = 3.8170

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2294	-.2326	-.2382	-.2276	-.2118	9.9990	9.9990	-.2174	-.2352	-.2303	-.2320	-.2271
14.000		-.2332	-.2397	-.2287	-.2125	9.9990	9.9990	-.2170	-.2348	-.2298	-.2282	-.2263
24.000									-.2350	-.2278	-.2278	-.2274
45.000	-.2267	-.2333	-.2359	-.2246	-.2091	-.1933	-.1929	-.2106	-.2333	-.2280	-.2202	-.2225
67.500		-.2325	-.2332	-.2204	-.2094	-.1962	-.1970	-.1996	-.2317	-.2249	-.2168	-.2176
90.000	-.2037	-.1686	-.1566	-.1486	-.1350	-.1112	-.1116	-.1195	-.1343	-.1354	-.1364	-.1082
112.500		.1324	.1961	.2341	.2371	.2861	.2778	.2544	.2661	.2718	.2714	.2047
135.000	.3885	.5986	.7071	.8162	.8393	.8997	.8741	.8752	.8665	.8431	.8114	.6124
157.500		1.0252	1.2239	1.3456	1.4007	1.4193	1.4204	1.4132	1.4306	1.4109	1.3678	1.0183
180.000	.9004	1.2043	1.4336	1.5805	1.6266	1.6353	1.6504	1.6319	1.6443	1.6307	1.5936	1.1842
202.500		1.0349	1.2344	1.3744	1.4189	1.4113	1.4241	1.4124	1.4060	1.3913	1.3539	1.0048
225.000	.4282	.6051	.7496	.8300	.8790	.8775	.8643	.8605	.8466	.8368	.8139	.6033
247.500		.1480	.2080	.2415	.2679	.2593	.2585	.2540	.2249	.2016	.2062	.1754
270.000	-.1908	-.1606	-.1368	-.1285	-.1229	-.1247	-.1247	-.1293	-.1395	-.1432	-.1402	-.1093
292.500		-.2326	-.2315	-.2213	-.2100	-.1938	-.1976	-.2006	-.2300	-.2247	-.2173	-.2101
315.000	-.2286	-.2324	-.2395	-.2241	-.2087	-.2064	-.2015	-.2102	-.2332	-.2290	-.2217	-.2127
326.000									9.9990	-.2225	-.2259	-.2164
346.000		-.2338	-.2403	-.2289	-.2127	9.9990	9.9990	-.2184	-.2369	-.2335	-.2343	-.2234
360.000	-.2294	-.2326	-.2382	-.2276	-.2118	9.9990	9.9990	-.2174	-.2352	-.2303	-.2320	-.2271

MACH (2) = 3.480 ALPHA (1) = 94.850 BETA = .00000 Q(PSI) = 6.8620 PO = 60.017 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0514	-.0458	-.0452	-.0480	-.0475	9.9990	9.9990	-.0384	-.0446	-.0475	-.0492	-.0508
14.000		-.0486	-.0486	-.0503	-.0497	9.9990	9.9990	-.0407	-.0486	-.0503	-.0492	-.0508
24.000									-.0497	-.0480	-.0497	-.0508
45.000	-.0508	-.0481	-.0487	-.0481	-.0497	.0280	-.0300	-.0401	-.0480	-.0486	-.0497	-.0525
67.500		-.0554	-.0585	-.0582	-.0587	-.0407	-.0537	-.0390	-.0531	-.0531	-.0525	-.0593
90.000	-.0029	.0184	.0263	.0353	.0533	.0880	.0680	.0648	.0409	.0338	.0291	.0426
112.500		.3670	.3171	.3543	.3701	.4090	.4056	.3859	.3752	.3735	.3690	.3075
135.000	.5043	.6953	.7996	.9180	.9383	.9941	.9817	.9738	.9501	.9310	.9000	.7162
157.500		1.1587	1.3615	1.4883	1.5266	1.5475	1.5554	1.5463	1.5514	1.5418	1.5127	1.1559
180.000	1.0341	1.3633	1.6062	1.7483	1.7810	1.7928	1.7894	1.7877	1.7956	1.7951	1.7719	1.3526
202.500		1.1677	1.3740	1.5087	1.5414	1.5352	1.5341	1.5290	1.5211	1.5149	1.4912	1.1446

NSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A078)

MACH (2) = 3.480 ALPHA (1) = 94.850

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5465	.7027	.8442	.9188	.9882	.9738	.9518	.9430	.9281	.9174	.8943	.7004
247.500		.6794	.3335	.3845	.3977	.3876	.3831	.3803	.3442	.3199	.3104	.2878
270.000	.0037	.0302	.0494	.0556	.0702	.0629	.0607	.0657	.0466	.0370	.0421	.0528
292.500		-.0548	-.0537	-.0593	-.0537	-.0424	-.0508	-.0362	-.0469	-.0480	-.0401	-.0537
315.000	-.0520	-.0514	-.0525	-.0537	-.0514	-.0480	-.0463	-.0317	-.0492	-.0514	-.0458	-.0508
326.000									9.9990	-.0277	-.0452	-.0508
346.000		-.0520	-.0514	-.0531	-.0520	9.9990	9.9990	-.0300	-.0503	-.0514	-.0463	-.0503
360.000	-.0514	-.0458	-.0452	-.0480	-.0475	9.9990	9.9990	-.0384	-.0446	-.0475	-.0492	-.0508

MACH (3) = 4.960 ALPHA (1) = 94.850 BETA = .00000 Q(PSI) = 3.0700 PO = 90.023 P = .17808

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0137	.0578	.0603	.0540	.0553	9.9990	9.9990	.0679	.0553	.0452	.0086	.0086
14.000		.0464	.0477	.0414	.0439	9.9990	9.9990	.0628	.0364	.0384	.0099	.0049
24.000									.0124	.0112	.0074	.0061
45.000	.0149	.0401	.0389	.0427	.0351	.2253	.0792	.0653	.0326	.0313	.0074	.0036
67.500		.0275	.0301	.0250	.0238	.0439	.0389	.0427	.0200	.0212	.0011	-.0013
90.000	.0565	.0767	.0842	.0868	.1019	.1132	.1157	.1195	.0855	.0767	.0716	.0805
112.500		.3072	.3513	.3853	.4005	.4257	.4269	.4131	.3853	.3816	.4181	.3387
135.000	.5491	.7381	.8376	.9473	.9435	1.0002	.9888	.9787	.9372	.9145	.8931	.7406
157.500		1.2232	1.4285	1.5344	1.5482	1.5709	1.5684	1.5520	1.5281	1.5192	1.5016	1.1942
180.000	1.1022	1.4373	1.6717	1.8040	1.8216	1.8241	1.8090	1.7851	1.7699	1.7687	1.7523	1.3907
202.500		1.2181	1.4247	1.5469	1.5810	1.5558	1.5304	1.5180	1.4915	1.4865	1.4688	1.1740
225.000	.5869	.7381	.8767	.9460	1.0014	.9901	.9498	.9435	.9132	.9019	.8792	.7293
247.500		.3211	.3791	.4055	.4634	.4231	.4093	.4181	.3715	.3463	.3186	.3551
270.000	.0590	.0880	.1107	.1107	.1334	.1233	.1132	.1296	.0994	.0905	.0918	.1006
292.500		.0162	.0200	.0124	.0225	.0225	.0137	.0338	.0162	.0124	.0162	.0149
315.000	.0175	.0187	.0200	.0137	.0149	.0175	.0149	.0351	.0112	.0124	.0112	.0099
326.000									9.9990	.0767	.0086	.0099
346.000		.0137	.0162	.0112	.0099	9.9990	9.9990	.0389	.0099	.0074	.0137	.0099
360.000	.0137	.0578	.0603	.0540	.0553	9.9990	9.9990	.0679	.0553	.0452	.0086	.0086

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A079) (16 NOV 74)

REFERENCE DATA

SREF = 572.8550 SQ. FT XMRP = 1088.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 384.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.870 ALPHA (1) = 97.850 BETA = .00000 Q(PSI) = 10.210 PO = 28.004 P = 3.7750

SECTION (1)ANK DEPENDENT VARIABLE CP

X/L8	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.2270	-.2288	-.2334	-.2193	-.2224	9.9990	9.9990	-.2148	-.2288	-.2250	-.2243	-.2205
14.000		-.2304	-.2342	-.2205	-.2221	9.9990	9.9990	-.2152	-.2293	-.2255	-.2207	-.2184
24.000									-.2293	-.2230	-.2200	-.2184
45.000	-.2245	-.2297	-.2289	-.2168	-.2180	-.1835	-.1888	-.2077	-.2282	-.2217	-.2122	-.2145
67.500		-.2291	-.2257	-.2132	-.2170	-.1958	-.1920	-.1973	-.2268	-.2193	-.2080	-.2171
90.000	-.2192	-.1803	-.1656	-.1542	-.1353	-.1167	-.1152	-.1236	-.1357	-.1334	-.1227	-.0825
112.500		.1073	.1767	.2244	.2365	.2805	.2737	.2513	.2650	.2786	.2886	.2495
135.000	.3287	.5339	.6596	.7896	.8165	.8870	.8608	.8620	.8570	.8441	.8305	.6820
157.500		.9473	1.1522	1.3063	1.3662	1.4071	1.3995	1.3980	1.4306	1.4086	1.3821	1.1093
180.000	.8163	1.1244	1.3708	1.5398	1.5928	1.6217	1.6277	1.6194	1.6724	1.6626	1.6284	1.2937
202.500		.9578	1.1764	1.3355	1.3806	1.3886	1.4037	1.4022	1.4102	1.4124	1.3940	1.1101
225.000	.3653	.5430	.7043	.7989	.8584	.8663	.8459	.8531	.8406	.8356	.8261	.6722
247.500		.1198	.1842	.2290	.2672	.2543	.2532	.2490	.2233	.2013	.2212	.2144
270.000	-.2071	-.1714	-.1456	-.1304	-.1213	-.1262	-.1262	-.1308	-.1387	-.1399	-.1305	-.0974
292.500		-.2280	-.2220	-.2110	-.2201	-.1905	-.1939	-.1988	-.2193	-.2144	-.2112	-.2101
315.000	-.2262	-.2292	-.2276	-.2155	-.2193	-.2072	-.1985	-.2091	-.2250	-.2208	-.2133	-.2073
326.000									9.9990	-.2145	-.2167	-.2091
346.000		-.2311	-.2342	-.2205	-.2236	9.9990	9.9990	-.2160	-.2308	-.2266	-.2247	-.2175
360.000	-.2270	-.2288	-.2334	-.2193	-.2224	9.9990	9.9990	-.2148	-.2288	-.2250	-.2243	-.2205

MACH (2) = 3.480 ALPHA (1) = 97.830 BETA = .00000 Q(PSI) = 6.8830 PO = 60.021 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/L8	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0537	-.0469	-.0452	-.0486	-.0463	9.9990	9.9990	-.0384	-.0424	-.0452	-.0492	-.0497
14.000		-.0497	-.0480	-.0520	-.0514	9.9990	9.9990	-.0396	-.0475	-.0480	-.0480	-.0492
24.000									-.0492	-.0480	-.0486	-.0497
45.000	-.0531	-.0503	-.0497	-.0508	-.0537	.0274	-.0311	-.0390	-.0475	-.0480	-.0475	-.0480
67.500		-.0560	-.0560	-.0605	-.0627	-.0413	-.0543	-.0379	-.0520	-.0532	-.0531	-.0537
90.000	-.0136	.0105	.0235	.0347	.0539	.0657	.0657	.0612	.0398	.0370	.0364	.0584
112.500		.2420	.3006	.3474	.3677	.4037	.3992	.3789	.3727	.3761	.3769	.3408
135.000	.4479	.6424	.7619	.8994	.9276	.9834	.9715	.9831	.9462	.9332	.9169	.7697
157.500		1.0798	1.3013	1.4573	1.5097	1.5311	1.5413	1.5334	1.5480	1.5463	1.5341	1.2506
180.000	.9388	1.2708	1.5362	1.7109	1.7593	1.7757	1.7745	1.7740	1.7926	1.7993	1.7917	1.4614
202.500		1.0855	1.3131	1.4765	1.5210	1.5187	1.5170	1.5165	1.5159	1.5187	1.5115	1.2365

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A079)

MACH (2) = 3.480 ALPHA (1) = 97.830

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4890	.6491	.8041	.8994	.9574	.9631	.9400	.9332	.9236	.9191	.9090	.7602
247.500		.2540	.3171	.3583	.3949	.3831	.3769	.3729	.3419	.3205	.3166	.3177
270.000	-.0046	.0201	.0454	.0539	.0702	.0618	.0584	.0623	.0443	.0387	.0443	.0646
292.500		-.0542	-.0525	-.0599	-.0537	-.0424	-.0497	-.0294	-.0446	-.0469	-.0430	-.0497
315.000	-.0514	-.0525	-.0508	-.0548	-.0554	-.0486	-.0469	-.0266	-.0492	-.0497	-.0452	-.0486
326.000									9.9990	-.0272	-.0475	-.0492
346.000		-.0531	-.0525	-.0548	-.0531	9.9990	9.9990	-.0244	-.0480	-.0497	-.0452	-.0480
360.000	-.0537	-.0469	-.0452	-.0486	-.0463	9.9990	9.9990	-.0384	-.0424	-.0452	-.0492	-.0497

MACH (3) = 4.960 ALPHA (1) = 97.830 BETA = .00000 Q(PSI) = 3.0710 PO = 90.049 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0112	.0602	.0639	.0589	.0501	9.9990	9.9990	.0577	.0614	.0514	.0112	.0112
14.000		.0463	.0475	.0475	.0400	9.9990	9.9990	.0538	.0412	.0400	.0086	.0074
24.000									.0112	.0111	.0086	.0086
45.000	.0111	.0414	.0363	.0477	.0313	.2353	.1434	.0401	.0363	.0351	.0086	.0061
67.500		.0313	.0313	.0326	.0212	.0489	.0489	.0376	.0263	.0263	.0036	.0036
90.000	.0439	.0678	.0741	.0855	.0968	.1132	.1157	.1018	.0817	.0779	.0754	.0930
112.500		.2783	.3299	.3803	.3929	.4282	.4269	.3942	.3791	.3816	.4282	.3476
135.000	.4947	.6749	.7883	.9281	.9419	.9911	.9797	.9545	.9243	.9104	.9041	.7895
157.500		1.1372	1.3563	1.5112	1.5478	1.5541	1.5515	1.5276	1.5314	1.5276	1.5205	1.2773
180.000	.9898	1.3465	1.6099	1.7813	1.8178	1.8103	1.7888	1.7712	1.7725	1.7788	1.7833	1.4986
202.500		1.1359	1.3752	1.5389	1.5704	1.5427	1.5301	1.5062	1.4949	1.4949	1.5003	1.2647
225.000	.5189	.6863	.8399	.9394	.9986	.9822	.9495	.9293	.9155	.9054	.8966	.7782
247.500		.2958	.3588	.4016	.4394	.4230	.4079	.4003	.3701	.3437	.3198	.4357
270.000	.0464	.0754	.0993	.1069	.1220	.1169	.1119	.1182	.0930	.0880	.0855	.1132
292.500		.0149	.0175	.0137	.0149	.0238	.0124	.0238	.0175	.0175	.0112	.0137
315.000	.0124	.0124	.0149	.0124	.0049	.0149	.0149	.0086	.0099	.0099	.0074	.0074
326.000									9.9990	.0043	.0074	.0061
346.000		.0137	.0124	.0137	.0099	9.9990	9.9990	.0149	.0112	.0099	.0061	.0111
360.000	.0112	.0602	.0639	.0589	.0501	9.9990	9.9990	.0577	.0614	.0514	.0112	.0112

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A080) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 90.000
MOUNT = 2.000 PHI = .000

MACH (1) = 1.960 ALPHA (1) = 99.730 BETA = .00000 Q(PSI) = 10.236 PO = 28.030 P = 3.7970

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	9230	.9540
THETA												
.000	-.2276	-.2318	-.2341	-.2180	-.2259	9.9990	9.9990	-.2158	-.2318	-.2265	-.2223	-.2174
14.000		-.2270	-.2281	-.2123	-.2206	9.9990	9.9990	-.2100	-.2255	-.2198	-.2210	-.2168
24.000									-.2264	-.2213	-.2198	-.2168
45.000	-.2247	-.2259	-.2229	-.2116	-.2188	-.1817	-.1859	-.2036	-.2248	-.2172	-.2107	-.2123
67.500		-.2282	-.2226	-.2120	-.2218	-.1961	-.1905	-.1954	-.2260	-.2169	-.2075	-.2218
90.000	-.2281	-.1867	-.1701	-.1576	-.1364	-.1164	-.1186	-.1243	-.1353	-.1315	-.1187	-.0679
112.500		.0867	.1589	.2129	.2307	.2715	.2662	.2454	.2617	.2791	.2990	.2782
135.000	.2912	.4964	.6259	.7720	.8080	.8754	.8538	.8561	.8496	.8440	.8432	.7234
157.500		.8978	1.1098	1.2816	1.3464	1.3944	1.3910	1.3918	1.4164	1.4107	1.3960	1.1623
180.000	.7612	1.0704	1.3248	1.5114	1.5738	1.6124	1.6155	1.6132	1.6654	1.6612	1.6380	1.3525
202.500		.9117	1.1378	1.3105	1.3666	1.3791	1.3919	1.3950	1.4150	1.4120	1.4045	1.1662
225.000	.3309	.5069	.6730	.7782	.8483	.8570	.8392	.8445	.8388	.8346	.8365	.7166
247.500		.0988	.1664	.2193	.2621	.2488	.2462	.2469	.2193	.2039	.2318	.2408
270.000	-.2160	-.1822	-.1550	-.1357	-.1263	-.1316	-.1316	-.1323	-.1437	-.1399	-.1245	-.0746
292.500		-.2270	-.2190	-.2084	-.2304	-.1929	-.1929	-.1990	-.2130	-.2122	-.2169	-.2217
315.000	-.2261	-.2290	-.2256	-.2135	-.2271	-.2067	-.1980	-.2082	-.2211	-.2222	-.2179	-.2100
326.000									9.9990	-.2164	-.2184	-.2113
346.000		-.2301	-.2317	-.2161	-.2256	9.9990	9.9990	-.2143	-.2264	-.2245	-.2209	-.2122
360.000	-.2276	-.2319	-.2341	-.2180	-.2259	9.9990	9.9990	-.2158	-.2318	-.2285	-.2223	-.2174

MACH (2) = 3.480 ALPHA (1) = 99.750 BETA = .00000 Q(PSI) = 6.8630 PO = 60.023 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0559	-.0475	-.0475	-.0492	-.0520	9.9990	9.9990	-.0458	-.0441	-.0469	-.0503	-.0497
14.000		-.0508	-.0520	-.0508	-.0531	9.9990	9.9990	-.0469	-.0475	-.0475	-.0497	-.0497
24.000									-.0497	-.0492	-.0497	-.0497
45.000	-.0554	-.0531	-.0542	-.0520	-.0582	.0268	-.0120	-.0497	-.0497	-.0486	-.0497	-.0492
67.500		-.0571	-.0593	-.0616	-.0655	-.0413	-.0509	-.0559	-.0531	-.0526	-.0542	-.0508
90.000	-.0227	.0014	.0144	.0313	.0442	.0628	.0623	.0488	.0352	.0330	.0358	.0651
112.500		.2223	.2848	.3400	.3592	.3970	.3913	.3654	.3648	.3722	.3823	.3524
135.000	.4079	.6046	.7286	.8797	.9140	.9698	.9580	.9473	.9360	.9264	.9202	.8086
157.500		1.0223	1.2511	1.4264	1.4879	1.5127	1.5228	1.5155	1.5352	1.5375	1.5380	1.3018
180.000	.8706	1.2060	1.4766	1.6756	1.7393	1.7579	1.7562	1.7562	1.7804	1.7922	1.7967	1.5228
202.500		1.0252	1.2618	1.4483	1.4996	1.5047	1.5013	1.4996	1.5063	1.5125	1.5194	1.2906

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T2 (R1A080)

MACH (2) = 3.480 ALPHA (1) = 99.750

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4468	.6077	.7688	.8826	.9463	.9531	.9300	.9204	.9170	.9147	.9147	.7919
247.500		.2348	.3002	.3515	.3891	.3791	.3724	.3611	.3357	.3171	.3169	.3384
270.000	-.0178	.0122	.0353	.0505	.0646	.0601	.0561	.0505	.0398	.0364	.0449	.0702
292.500		-.0565	-.0559	-.0616	-.0599	-.0441	-.0492	-.0475	-.0469	-.0480	-.0475	-.0458
315.000	-.0565	-.0559	-.0565	-.0565	-.0610	-.0497	-.0469	-.0497	-.0503	-.0497	-.0492	-.0503
326.000									9.9990	-.0227	-.0508	-.0497
346.000		-.0554	-.0576	-.0559	-.0587	9.9990	9.9990	-.0497	-.0497	-.0503	-.0509	-.0492
360.000	-.0559	-.0475	-.0475	-.0492	-.0520	9.9990	9.9990	-.0458	-.0441	-.0469	-.0503	-.0497

MACH (3) = 4.960 ALPHA (1) = 99.750 BETA = .00000 Q(PSI) = 3.0710 PO = 90.042 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0086	.0515	.0502	.0490	.0427	9.9990	9.9990	.0477	.0502	.0414	.0061	.0061
14.000		.0389	.0376	.0401	.0351	9.9990	9.9990	.0414	.0326	.0326	.0086	.0086
24.000									.0074	.0111	.0036	.0049
45.000	.0137	.0326	.0313	.0376	.0225	.2215	.1295	.0300	.0263	.0263	.0049	.0074
67.500		.0275	.0225	.0238	.0162	.0414	.0414	.0200	.0187	.0200	-.0001	.0036
90.000	.0364	.0615	.0703	.0842	.0905	.1069	.1107	.0943	.0766	.0741	.0741	.0968
112.500		.2605	.3147	.3739	.3865	.4117	.4167	.3802	.3689	.3739	.4268	.3600
135.000	.4469	.6371	.7543	.9079	.9306	.9722	.9608	.9344	.9104	.8953	.9015	.8199
157.500		1.0754	1.3022	1.4772	1.5289	1.5289	1.5264	1.5049	1.5112	1.5125	1.5192	1.3126
180.000	.9167	1.2744	1.5478	1.7417	1.7858	1.7846	1.7619	1.7442	1.7505	1.7594	1.7757	1.5515
202.500		1.0780	1.3248	1.5100	1.5490	1.5213	1.5075	1.4923	1.4785	1.4835	1.4986	1.3097
225.000	.4773	.6510	.8021	.9230	.9810	.9633	.9331	.9155	.8991	.8979	.8986	.8072
247.500		.2807	.3437	.3978	.4369	.4142	.4029	.3915	.3613	.3437	.3160	.4281
270.000	.0389	.0691	.0955	.1069	.1232	.1144	.1094	.1069	.0918	.0855	.0905	.1182
292.500		.0149	.0124	.0099	.0137	.0200	.0111	.0174	.0099	.0099	.0074	.0137
315.000	.0086	.0149	.0111	.0124	.0086	.0162	.0149	.0137	.0111	.0099	.0049	.0099
326.000									9.9990	.0918	.0061	.0061
346.000		.0137	.0112	.0124	.0074	9.9990	9.9990	.0124	.0086	.0086	.0036	.0086
360.000	.0086	.0515	.0502	.0490	.0427	9.9990	9.9990	.0477	.0502	.0414	.0061	.0061

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A081) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = -8.380 BETA = .00000 Q(PSI) = 6.8640 PO = 60.032 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6461	.3605	.1554	.0285	.0584	.0280	.0099	.0105	.0105	.0686	.2637	-.0768
14.000		.3965	.1762	.0415	.0601	.0032	.0077	.0150	.0156	.0826	.2178	-.0458
24.000									.0455	.1395	.1609	-.0813
45.000	.7784	.4178	.1930	.0538	.0606	.0623	.0307	.0223	.0318	.0217	.1434	-.0689
67.500		.4150	.1947	.0516	.0414	.0302	.0285	.0200	.0251	.0149	.0834	-.0830
90.000	.8987	.3679	.1644	.0353	9.9990	.0127	.0111	.0043	-.0024	-.0001	.0178	-.0768
112.500		.3064	.1238	.0116	-.0012	-.0091	-.0153	-.0176	-.0286	-.0283	-.0001	-.0689
135.000	.8215	.2485	.0848	-.0114	-.0204	-.0312	-.0328	-.0305	9.9990	-.0486	-.0452	-.0706
157.500		.1879	.0471	-.0306	-.0393	-.0424	-.0368	-.0390	-.0227	-.0447	-.0441	-.0700
180.000	.3710	.1412	.0228	-.0424	-.0430	-.0368	-.0328	-.0317	-.0362	-.0340	-.0306	-.0712
202.500		.1226	.0065	-.0497	-.0430	-.0328	-.0328	-.0396	-.0390	-.0295	-.0272	-.0678
225.000	.3248	.1159	.0043	-.0508	-.0407	-.0265	-.0131	-.0069	-.0114	-.0091	-.0075	-.0678
247.500		.1169	.0037	-.0520	-.0441	-.0317	-.0188	-.0193	-.0216	-.0204	-.0040	-.0627
270.000	.3739	.1428	.0155	-.0475	9.9990	-.0407	-.0407	-.0340	-.0289	-.0255	.0014	-.0633
292.500		.1778	.0397	-.0357	-.0238	-.0295	-.0509	-.0424	-.0481	-.0221	-.0013	-.0712
315.000	.5666	.2460	.0769	-.0176	-.0159	-.0244	-.0486	-.0531	-.0492	-.0159	.0026	-.0757
326.000									-.0159	-.0035	-.0216	-.0762
346.000		.3400	.1536	.0307	.0527	-.0035	.0178	.0037	.0268	.0538	.1879	-.0785
360.000	.6461	.3605	.1554	.0285	.0584	.0280	.0099	.0105	.0105	.0686	.2637	-.0768

MACH (2) = 4.960 ALPHA (1) = -8.330 BETA = .00000 Q(PSI) = 3.0700 PO = 90.024 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6197	.3312	.1523	.0817	.0855	.0830	.0653	.0716	.0641	.0754	.1447	-.0026
14.000		.3683	.1673	.0855	.0729	.0653	.0578	.0552	.0565	.0766	.1800	.0011
24.000									.0515	.0855	.1397	-.0114
45.000	.7268	.3954	.1926	.0880	.0767	.0742	.0628	.0578	.0540	.0553	.0988	-.0089
67.500		.3929	.1901	.0817	.0653	.0616	.0603	.0527	.0515	.0464	.0616	-.0114
90.000	.6613	.3526	.1687	.0704	9.9990	.0439	.0515	.0439	.0364	.0364	.0326	-.0114
112.500		.2959	.1321	.0540	.0401	.0326	.0364	.0338	.0275	.0238	.0250	-.0001
135.000	.5025	.2367	.0981	.0401	.0301	.0275	.0263	.0263	9.9990	.0149	.0061	-.0013
157.500		.1901	.0716	.0313	.0250	.0212	.0225	.0200	.0716	.0124	.0011	-.0013
180.000	.3614	.1447	.0590	.0263	.0187	.0162	.0200	.0200	.0200	.0074	.0036	-.0026
202.500		.1233	.0427	.0187	.0149	.0149	.0149	.0149	.0137	.0074	.0049	-.0001

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A081)

MACH (2) = 4.960 ALPHA (1) = -8.330

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.8100	.7380	.8600	.8920	.9230	.9540
THETA												
225.000	.3035	.1145	.0328	.0137	.0099	.0182	.0137	.0137	.0112	.0086	.0099	-.0039
247.500		.1170	.0351	.0149	.0086	.0137	.0099	.0112	.0049	.0049	.0061	.0036
270.000	.3463	.1359	.0452	.0137	9.9990	.0099	.0086	.0112	.0049	.0036	.0049	.0011
292.500		.1636	.0590	.0137	.0187	.0124	.0099	.0086	.0036	.0011	.0036	-.0001
315.000	.5080	.2253	.0880	.0238	.0225	.0061	.0086	.0086	-.0001	-.0001	.0137	-.0064
326.000									.0124	.0238	.0074	-.0051
346.000		.3098	.1372	.0502	.0565	.0328	.0351	.0263	.0288	.0502	.1157	-.0114
360.000	.6197	.3312	.1523	.0817	.0855	.0830	.0653	.0716	.0641	.0754	.1447	-.0026

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A082) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 6.8640 PO = 60.034 P = .81080

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5829	.3025	.1148	.0043	.0330	.0060	-.0080	-.0052	-.0058	.0770	.1564	-.0644
14.000		.3194	.1232	.0111	.0381	-.0159	-.0108	-.0041	-.0012	.0635	.1810	-.0712
24.000									.0133	.0538	.1738	-.0852
45.000	.6564	.3261	.1322	.0156	.0302	.0263	.0032	-.0001	-.0029	.0009	.1062	-.0700
67.500		.3273	.1339	.0161	.0133	.0077	.0060	.0003	.0037	-.0035	.0409	-.0802
90.000	.6178	.3051	.1197	.0082	9.9990	-.0013	.0014	-.0035	-.0097	-.0092	.0059	-.0740
112.500		.2798	.1034	-.0002	-.0069	-.0103	-.0103	-.0097	-.0159	-.0159	.0121	-.0633
135.000	.5327	.2522	.0854	-.0120	-.0154	-.0188	-.0176	-.0176	9.9990	-.0204	-.0171	-.0639
157.500		.2161	.0623	-.0227	-.0250	-.0216	-.0193	-.0148	.0003	-.0182	-.0171	-.0633
180.000	.4477	.1879	.0499	-.0295	-.0295	-.0199	-.0171	-.0120	-.0137	-.0148	-.0193	-.0650
202.500		.1800	.0397	-.0334	-.0306	-.0188	-.0159	-.0114	-.0131	-.0126	-.0137	-.0616
225.000	.4189	.1756	.0364	-.0362	-.0328	-.0198	-.0148	-.0097	-.0103	-.0086	-.0064	-.0610
247.500		.1778	.0364	-.0351	-.0334	-.0199	-.0159	-.0109	-.0131	-.0126	.0076	-.0638
270.000	.4508	.1913	.0459	-.0312	9.9990	-.0244	-.0171	-.0182	-.0188	-.0148	.0036	-.0667
292.500		.2117	.0612	-.0249	-.0103	-.0103	-.0221	-.0215	-.0187	-.0260	.0262	-.0655
315.000	.5620	.2476	.0781	-.0165	-.0165	-.0064	-.0250	-.0193	-.0351	-.0086	.0775	-.0650
326.000									-.0035	.0087	.0803	-.0757
346.000		.3160	.1260	.0082	.0280	-.0311	-.0012	-.0024	-.0024	.0793	.1440	-.0751
360.000	.5829	.3025	.1148	.0043	.0330	.0060	-.0080	-.0052	-.0058	.0770	.1564	-.0644

MACH (2) = 4.960 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0710 PO = 90.041 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5464	.2732	.1283	.0792	.0842	.0767	.0666	.0704	.0653	.0742	.0855	-.0001
14.000		.2909	.1271	.0716	.0679	.0603	.0540	.0515	.0515	.0653	.0968	-.0089
24.000									.0326	.0502	.0968	-.0102
45.000	.6006	.3047	.1334	.0679	.0641	.0628	.0527	.0502	.0427	.0477	.0590	-.0089
67.500		.3060	.1359	.0590	.0540	.0515	.0527	.0477	.0427	.0427	.0363	-.0127
90.000	.5817	.2896	.1309	.0553	9.9990	.0427	.0477	.0414	.0338	.0351	.0174	-.0127
112.500		.2631	.1069	.0452	.0389	.0338	.0376	.0351	.0250	.0313	.0212	.0036
135.000	.5099	.2391	.0993	.0414	.0338	.0275	.0326	.0326	9.9990	.0237	.0137	.0011
157.500		.2102	.0817	.0351	.0288	.0250	.0288	.0275	.0918	.0225	.0099	.0023
180.000	.4306	.1850	.0716	.0288	.0237	.0250	.0250	.0250	.0263	.0137	.0086	.0011
202.500		.1761	.0603	.0225	.0200	.0225	.0212	.0212	.0174	.0162	.0086	.0011

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A082)

MACH (2) = 4.960 ALPHA (1) = -4.290

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4041	.1711	.0540	.0187	.0162	.0200	.0187	.0174	.0137	.0099	.0086	-.0026
247.500		.1724	.0540	.0174	.0124	.0187	.0162	.0162	.0074	.0086	.0162	.0049
270.000	.4192	.1850	.0653	.0174	9.9990	.0111	.0149	.0162	.0061	.0074	.0099	-.0026
292.500		.2051	.0716	.0174	.0275	.0137	.0162	.0162	.0074	.0074	.0212	-.0026
315.000	.5175	.2265	.0842	.0225	.0263	.0137	.0174	.0162	.0011	.0137	.0263	-.0013
326.000									.0187	.0212	.0300	-.0089
346.000		.2807	.1018	.0313	.0414	.0162	.0200	.0162	.0187	.0338	.0703	-.0114
360.000	.5464	.2732	.1283	.0792	.0842	.0767	.0666	.0704	.0653	.0742	.0855	-.0001

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A083) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8650 PO = 60.039 P = .81000

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5113	.2557	.0810	-.0108	.0088	-.0103	-.0170	-.0108	-.0001	.0477	.1597	-.0633
14.000		.2523	.0810	-.0108	.0099	-.0069	-.0204	-.0108	-.0035	.0494	.1496	-.0700
24.000									.0059	.0544	.1361	-.0790
45.000	.5395	.2420	.0792	-.0131	.0014	-.0002	-.0114	-.0109	-.0131	.0059	.1000	-.0757
67.500		.2488	.0831	-.0114	-.0081	-.0047	-.0086	-.0069	-.0019	-.0092	.0409	-.0683
90.000	.5356	.2471	.0809	-.0120	9.9990	-.0086	-.0030	-.0058	-.0097	-.0075	.0076	-.0695
112.500		.2488	.0786	-.0114	-.0131	-.0075	-.0052	-.0030	-.0069	-.0069	.0172	-.0605
135.000	.5372	.2522	.0831	-.0126	-.0148	-.0092	-.0064	-.0035	9.9990	-.0058	-.0069	-.0554
157.500		.2476	.0831	-.0114	-.0143	-.0109	-.0069	-.0058	.0206	-.0058	-.0092	-.0520
180.000	.5294	.2375	.0786	-.0126	-.0165	-.0097	-.0064	-.0052	-.0058	-.0204	-.0103	-.0520
202.500		.2476	.0814	-.0120	-.0148	-.0114	-.0064	-.0041	-.0058	-.0058	-.0086	-.0520
225.000	.5271	.2492	.0808	-.0126	-.0154	-.0109	-.0075	-.0047	-.0075	-.0070	-.0069	-.0571
247.500		.2499	.0826	-.0114	-.0131	-.0103	-.0058	-.0024	-.0058	-.0058	.0121	-.0650
270.000	.5367	.2499	.0842	-.0103	9.9990	-.0103	-.0030	-.0007	-.0081	-.0058	.0082	-.0678
292.500		.2443	.0814	-.0126	-.0030	-.0059	.0014	-.0075	-.0047	-.0114	.0302	-.0683
315.000	.5581	.2476	.0814	-.0131	-.0030	.0054	-.0114	-.0120	-.0114	-.0171	.0747	-.0734
326.000									.0234	.0133	.0595	-.0745
346.000		.2786	.0983	-.0019	.0110	-.0464	-.0154	-.0137	.0121	.0561	.1090	-.0745
360.000	.5113	.2557	.0810	-.0108	.0088	-.0103	-.0170	-.0108	-.0001	.0477	.1597	-.0633

MACH (2) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0700 PO = 90.020 P = .17800

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4483	.2255	.1020	.0642	.0679	.0667	.0515	.0553	.0541	.0804	.0578	-.0051
14.000		.2242	.0931	.0566	.0540	.0528	.0440	.0440	.0452	.0578	.0970	-.0063
24.000									.0238	.0377	.0830	-.0089
45.000	.4891	.2241	.0893	.0502	.0477	.0401	.0414	.0389	.0288	.0364	.0477	-.0139
67.500		.2329	.0956	.0427	.0414	.0401	.0427	.0351	.0338	.0338	.0187	-.0089
90.000	.5013	.2304	.0880	.0401	9.9990	.0376	.0389	.0338	.0250	.0275	.0086	-.0089
112.500		.2354	.0905	.0389	.0326	.0288	.0351	.0313	.0263	.0238	.0175	.0036
135.000	.5101	.2367	.0905	.0351	.0263	.0275	.0288	.0301	9.9990	.0212	.0125	.0049
157.500		.2354	.0893	.0338	.0275	.0275	.0288	.0263	.1006	.0212	.0112	.0061
180.000	.5063	.2327	.0892	.0325	.0237	.0262	.0250	.0237	.0254	.0136	.0112	.0061
202.500		.2379	.0918	.0301	.0212	.0212	.0212	.0200	.0187	.0137	.0112	.0049

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A083)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

MACH (2) = 4.980 ALPHA (1) = -.280

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5038	.2378	.0918	.0288	.0212	.0200	.0225	.0200	.0162	.0137	.0124	.0023
247.500		.2341	.0905	.0275	.0187	.0174	.0200	.0187	.0099	.0111	.0149	.0011
270.000	.4979	.2316	.0868	.0250	9.9990	.0187	.0200	.0200	.0099	.0112	.0 ?	.0037
292.500		.2266	.0860	.0238	.0250	.0212	.0212	.0200	.0099	.0099	.0263	-.0026
315.000	.5151	.2203	.0817	.0225	.0250	.0175	.0200	.0187	.0049	.0124	.0389	-.0026
326.000									.0238	.0238	.0401	-.0039
346.000		.2493	.0991	.0238	.0313	.0099	.0124	.0124	.0162	.0250	.0540	-.0101
360.000	.4483	.2255	.1020	.0642	.0679	.0667	.0515	.0553	.0541	.0604	.0578	-.0051

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A084) (16 NOV 74)

REFERENCE DATA

SREF = 572.6000 SQ. FT XMRP = 1088.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 8.8850 PO = 60.039 P = .81003

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4302	.2072	.0471	-.0280	-.0170	-.0382	-.0272	-.0210	-.0170	.0477	.1282	-.0700
14.000		.1814	.0426	-.0284	-.0189	-.0446	-.0266	-.0182	-.0114	.0307	.1316	-.0745
24.000									.0003	.0335	.1372	-.0813
45.000	.4268	.1718	.0352	-.0328	-.0216	-.0165	-.0221	-.0148	-.0182	-.0058	.0989	-.0740
67.500		.1789	.0403	-.0328	-.0261	-.0159	-.0131	-.0128	-.0058	-.0131	.0288	-.0712
90.000	.4516	.1913	.0448	-.0300	9.9990	-.0171	-.0126	-.0131	-.0159	-.0143	-.0052	-.0717
112.500		.2144	.0583	-.0233	-.0250	-.0193	-.0159	-.0131	-.0171	-.0164	-.0103	-.0565
135.000	.5327	.2460	.0786	-.0148	-.0193	-.0193	-.0165	-.0154	9.9990	-.0182	-.0176	-.0554
157.500		.2741	.0961	-.0035	-.0103	-.0131	-.0126	-.0126	.0149	-.0159	-.0148	-.0520
180.000	.6065	.2905	.1135	.0071	-.0019	-.0024	-.0041	-.0058	-.0088	-.0092	-.0103	-.0503
202.500		.3209	.1276	.0144	.0048	.0042	.0020	-.0002	-.0035	-.0019	-.0019	-.0520
225.000	.6443	.3333	.1372	.0189	.0110	.0059	.0059	.0042	.0014	.0026	.0037	-.0588
247.500		.3269	.1326	.0171	.0121	.0031	.0053	.0059	.0019	.0036	.0200	-.0627
270.000	.6212	.3113	.1209	.0110	9.9990	.0020	.0026	.0037	-.0013	.0009	.0200	-.0678
292.500		.2803	.1040	-.0002	.0009	.0042	.0009	-.0007	-.0030	-.0069	.0414	-.0678
315.000	.5502	.2454	.0814	-.0120	-.0092	.0026	-.0035	-.0120	-.0204	-.0120	.1051	-.0655
326.000									.0026	.0054	.0944	-.0655
346.000		.2347	.0752	-.0148	-.0159	-.0396	-.0283	-.0255	-.0137	.0465	.1073	-.0745
360.000	.4302	.2072	.0471	-.0260	-.0170	-.0362	-.0272	-.0210	-.0170	.0477	.1282	-.0700

MACH (2) = 4.960 ALPHA (1) = 3.730 BETA = .00000 Q(PSI) = 3.0710 PO = 90.033 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3665	.1913	.0988	.0716	.0729	.0779	.0603	.0742	.0641	.0704	.0477	-.0013
14.000		.1736	.0741	.0615	.0515	.0540	.0489	.0552	.0477	.0578	.0742	-.0039
24.000									.0225	.0313	.0565	-.0114
45.000	.3979	.1636	.0729	.0527	.0515	.0477	.0439	.0615	.0389	.0464	.0313	-.0039
67.500		.1724	.0666	.0401	.0439	.0414	.0489	.0628	.0401	.0389	.0112	.0061
90.000	.4293	.1850	.0716	.0414	9.9990	.0414	.0414	.0653	.0351	.0338	.0086	.0086
112.500		.2064	.0804	.0401	.0351	.0338	.0363	.0439	.0275	.0338	.0187	.0238
135.000	.5137	.2391	.0918	.0389	.0300	.0263	.0313	.0363	9.9990	.0225	.0200	.0250
157.500		.2719	.1132	.0452	.0376	.0288	.0338	.0351	.1118	.0250	.0137	.0225
180.000	.5881	.2934	.1288	.0490	.0351	.0288	.0313	.0351	.0328	.0200	.0149	.0200
202.500		.3211	.1384	.0477	.0351	.0313	.0288	.0338	.0238	.0225	.0175	.0200

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A084)

MACH (2) = 4.960 ALPHA (1) = 3.730

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.6359	.3362	.1498	.0540	.0414	.0326	.0338	.0376	.0263	.0238	.0212	.0175
247.500		.3287	.1472	.0515	.0389	.0288	.0301	.0351	.0212	.0212	.0275	.0099
270.000	.6146	.3098	.1296	.0427	9.9990	.0250	.0238	.0313	.0149	.0175	.0275	.0099
292.500		.2783	.1195	.0376	.0338	.0238	.0263	.0313	.0162	.0175	.0237	.0011
315.000	.5151	.2417	.0956	.0288	.0250	.0250	.0225	.0263	.0099	.0187	.0288	-.0013
326.000									.0187	.0212	.0389	-.0001
346.000		.2178	.0868	.0238	.0212	.0137	.0112	.0175	.0061	.0187	.0427	-.0026
360.000	.3665	.1913	.0968	.0716	.0729	.0779	.0603	.0742	.0641	.0704	.0477	-.0013

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A085) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(PSI) = 6.8640 PO = 60.035 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3498	.1632	.0240	-.0379	-.0311	-.0339	-.0424	-.0418	-.0176	-.0058	.0257	-.0745
14.000		.1398	.0109	-.0425	-.0340	-.0307	-.0369	-.0324	-.0217	.0025	.0933	-.0836
24.000									-.0080	.0302	.0695	-.0847
45.000	.3322	.1140	.0031	-.0470	-.0346	-.0211	-.0256	-.0154	-.0227	-.0109	.0893	-.0796
67.500		.1226	.0082	-.0464	-.0362	-.0255	-.0233	-.0210	-.0182	-.0250	.0705	-.0790
90.000	.3727	.1434	.0172	-.0430	9.9990	-.0317	-.0306	-.0334	-.0357	-.0351	-.0216	-.0734
112.500		.1840	.0414	-.0317	-.0345	-.0390	-.0334	-.0328	-.0357	-.0351	-.0314	-.0621
135.000	.5209	.2414	.0775	-.0137	-.0221	-.0340	-.0351	-.0374	9.9990	-.0379	-.0396	-.0582
157.500		.3006	.1158	.0087	-.0041	-.0137	-.0171	-.0227	.0104	-.0283	-.0276	-.0588
180.000	.6854	.3502	.1564	.0335	.0200	.0116	.0065	.0026	-.0002	-.0035	-.0035	-.0605
202.500		.4073	.1880	.0505	.0359	.0280	.0246	.0189	.0167	.0173	.0178	-.0621
225.000	.7626	.4299	.2016	.0607	.0466	.0381	.0342	.0297	.0263	.0268	.0268	-.0627
247.500		.4158	.1948	.0556	.0454	.0297	.0291	.0263	.0223	.0206	.0443	-.0728
270.000	.7113	.3784	.1676	.0380	9.9990	.0149	.0127	.0110	.0076	.0093	.0318	-.0723
292.500		.3175	.1288	.0155	.0071	.0076	.0009	-.0035	-.0052	.0155	.0166	-.0734
315.000	.5381	.2517	.0872	-.0091	-.0097	.0032	-.0035	-.0114	-.0063	.0099	.0341	-.0717
326.000									.0003	.0099	.0629	-.0683
346.000		.1802	.0477	-.0283	-.0306	-.0503	-.0475	-.0458	-.0120	-.0029	.0285	-.0700
360.000	.3498	.1632	.0240	-.0379	-.0311	-.0339	-.0424	-.0418	-.0176	-.0058	.0257	-.0745

MACH (2) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(PSI) = 3.0700 PO = 90.029 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3173	.1574	.0729	.0515	.0515	.0586	.0427	.0427	.0414	.0440	.0149	-.0013
14.000		.1334	.0527	.0439	.0338	.0364	.0338	.0364	.0301	.0351	.0641	-.0039
24.000									.0124	.0137	.0200	-.0114
45.000	.3098	.1144	.0477	.0363	.0326	.0313	.0313	.0389	.0250	.0263	.0137	-.0076
67.500		.1207	.0426	.0263	.0250	.0313	.0338	.0414	.0250	.0237	.0023	-.0051
90.000	.3589	.1421	.0527	.0313	9.9990	.0263	.0326	.0452	.0212	.0237	-.0013	-.0013
112.500		.1799	.0653	.0300	.0263	.0237	.0250	.0263	.0225	.0212	.0124	.0086
135.000	.5038	.2353	.0918	.0363	.0250	.0187	.0237	.0200	9.9990	.0137	.0099	.0086
157.500		.2984	.1271	.0477	.0338	.0288	.0275	.0225	.1195	.0187	.0099	.0023
180.000	.6865	.3539	.1649	.0628	.0452	.0389	.0364	.0326	.0364	.0238	.0225	.0023
202.500		.4093	.1964	.0767	.0565	.0477	.0452	.0389	.0376	.0364	.0364	-.0001

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A065)

MACH (2) = 4.960 ALPHA (1) = 7.750

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.7608	.4293	.2064	.0829	.0603	.0502	.0477	.0426	.0401	.0363	.0427	-.0013
247.500		.4194	.2052	.0817	.0628	.0540	.0477	.0427	.0364	.0364	.0477	.0011
270.000	.7016	.3778	.1787	.0666	9.9990	.0338	.0351	.0313	.0238	.0225	.0364	.0011
292.500		.3186	.1372	.0464	.0338	.0313	.0250	.0212	.0137	.0200	.0263	-.0064
315.000	.5126	.2543	.1044	.0301	.0238	.0250	.0187	.0200	.0162	.0225	.0275	-.0064
326.000									.0175	.0250	.0263	-.0076
346.000		.1624	.0641	.0162	.0162	.0036	.0036	.0061	.0036	.0049	.0099	-.0064
360.000	.3173	.1574	.0729	.0515	.0515	.0566	.0427	.0427	.0414	.0440	.0149	-.0013

MSFC 596 (T4-2F) MCR0200 EXTERNAL TANK, T1 (R1A086) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 12.520 BETA = .00000 Q(PSI) = 6.8610 PO = 60.006 P = .80900

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2641	.1276	.0098	-.0406	-.0366	-.0361	-.0519	-.0457	-.0321	-.0084	.0099	-.0604
14.000		.0953	-.0073	-.0462	-.0446	-.0344	-.0440	-.0502	-.0361	-.0169	.0623	-.0796
24.000									-.0401	-.0356	.0026	-.0818
45.000	.2557	.0727	-.0164	-.0502	-.0451	-.0186	-.0175	-.0192	-.0254	-.0237	.0499	-.0830
67.500		.0782	-.0119	-.0525	-.0452	-.0384	-.0469	-.0536	-.0519	-.0514	-.0345	-.0830
90.000	.3036	.1035	-.0024	-.0497	9.9990	-.0418	-.0469	-.0486	-.0480	-.0469	-.0435	-.0779
112.500		.1554	.0291	-.0373	-.0446	-.0486	-.0469	-.0458	-.0492	-.0508	-.0503	-.0700
135.000	.4998	.2343	.0748	-.0148	-.0272	-.0379	-.0458	-.0497	9.9990	-.0559	-.0582	-.0694
157.500		.3228	.1334	.0195	.0026	-.0080	-.0165	-.0215	.0404	-.0277	-.0277	-.0706
180.000	.7551	.4071	.1969	.0595	.0403	.0335	.0228	.0183	.0161	.0121	.0099	-.0740
202.500		.4959	.2517	.0860	.0691	.0635	.0528	.0466	.0477	.0471	.0460	-.0711
225.000	.8853	.5305	.2769	.1073	.0865	.0786	.0713	.0634	.0628	.0651	.0618	-.0717
247.500		.5122	.2641	.0996	.0860	.0680	.0618	.0595	.0567	.0545	.0742	-.0717
270.000	.7923	.4485	.2202	.0725	9.9990	.0421	.0336	.0308	.0268	.0246	.0375	-.0689
292.500		.3532	.1587	.0325	.0178	.0173	.0015	-.0001	-.0024	.0043	.0370	-.0683
315.000	.5381	.2636	.0950	-.0041	-.0125	.0127	-.0001	-.0029	-.0029	.0111	.0635	-.0717
326.000									-.0001	.0189	.0736	-.0689
346.000		.1187	.0133	-.0407	-.0497	-.0593	-.0638	-.0531	-.0311	-.0041	.0274	-.0728
360.000	.2641	.1275	.0096	-.0406	-.0366	-.0361	-.0519	-.0457	-.0321	-.0084	.0099	-.0604

MACH (2) = 4.960 ALPHA (1) = 12.450 BETA = .00000 Q(PSI) = 3.0710 PO = 90.049 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2404	.1283	.0817	.0666	.0691	.0767	.0590	.1750	.0578	.0590	.0036	-.0051
14.000		.1069	.0527	.0553	.0439	.0464	.0477	.1157	.0389	.0414	.0590	-.0114
24.000									.0023	.0023	.0049	-.0139
45.000	.2328	.0918	.0552	.0464	.0464	.0401	.0426	.1132	.0338	.0338	.0011	-.0152
67.500		.0905	.0401	.0300	.0313	.0363	.0401	.1031	.0288	.0275	-.0089	-.0139
90.000	.2882	.1107	.0477	.0338	9.9990	.0300	.0376	.1044	.0250	.0250	-.0127	-.0102
112.500		.1535	.0578	.0313	.0300	.0225	.0313	.1018	.0237	.0225	.0036	.0754
135.000	.4809	.2278	.0867	.0376	.0300	.0250	.0263	.0981	9.9990	.0149	.0923	.0729
157.500		.3197	.1384	.0540	.0426	.0300	.0338	.1018	.0502	.0225	.0111	.0716
180.000	.7442	.4066	.1963	.0792	.0678	.0452	.0477	.1157	.0414	.0313	.0313	.0678
202.500		.4923	.2467	.1031	.0804	.0628	.0866	.1308	.0565	.0565	.0603	.0678

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A086)

MACH (2) = 4.880 ALPHA (1) = 12.450

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8827	.5278	.2708	.1157	.0905	.0792	.0779	.1434	.0691	.0691	.0754	.0678
247.500		.5080	.2592	.1106	.0892	.0678	.0703	.1383	.0628	.0590	.0817	-.0013
270.000	.7744	.4432	.2215	.0892	9.8990	.0502	.0515	.1207	.0401	.0401	.0527	-.0064
292.500		.3500	.1638	.0565	.0439	.0275	.0288	.1006	.0200	.0237	.0328	-.0089
315.000	.5187	.2829	.1068	.0313	.0250	.0250	.0262	.0980	.0187	.0237	.0300	-.0089
326.000									.0187	.0225	.0326	-.0114
346.000		.1189	.0401	.0088	.0061	-.0013	.0036	.0779	-.0039	-.0026	.0049	-.0102
360.000	.2404	.1283	.0817	.0668	.0691	.0767	.0590	.1750	.0578	.0590	.0036	-.0051

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A087) (16 NOV 74)

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 16.560 BETA = .00000 Q(PSI) = 6.8640 PO = 60.030 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8500	.8920	.9230	.9540
THETA												
.000	.1530	.0895	-.0119	-.0486	-.0491	-.0531	-.0559	.0049	-.0395	-.0266	-.0137	-.0745
14.000		.0527	-.0295	-.0537	-.0543	-.0588	-.0605	-.0261	-.0486	-.0295	.0409	-.0852
24.000									-.0554	-.0351	-.0216	-.0931
45.000	.1834	.0330	-.0322	-.0492	-.0193	-.0187	-.0356	-.0097	-.0384	-.0548	-.0131	-.0903
67.500		.0358	-.0351	-.0621	-.0576	-.0610	-.0621	-.0283	-.0633	-.0655	-.0638	-.0881
90.000	.2285	.0617	-.0255	-.0599	9.9990	-.0638	-.0593	-.0317	-.0638	-.0633	-.0667	-.0881
112.500		.1210	.0060	-.0497	-.0582	-.0666	-.0621	-.0339	-.0638	-.0638	-.0661	-.0469
135.000	.4679	.2161	.0634	-.0221	-.0362	-.0554	-.0565	-.0300	9.9990	-.0657	-.0683	-.0458
157.500		.3408	.1469	.0280	.0088	-.0159	-.0153	.0105	-.0176	-.0283	-.0255	-.0492
180.000	.8184	.4634	.2392	.0871	.0657	.0442	.0414	.0668	.0302	.0296	.0302	-.0486
202.500		.5868	.3169	.1327	.1079	.0950	.0882	.1119	.0826	.0837	.0842	-.0402
225.000	1.0117	.6398	.3564	.1609	.1365	.1192	.1169	.1378	.1068	.1130	.1685	-.0368
247.500		.6072	.3359	.1470	.1307	.0985	.1013	.1284	.0940	.0917	.1226	-.0813
270.000	.8680	.5127	.2681	.1046	9.9990	.0564	.0561	.0832	.0477	.0460	.0640	-.0790
292.500		.3797	.1768	.0466	.0257	.0094	.0009	.0285	-.0074	-.0024	.0302	-.0986
315.000	.5378	.2600	.0938	-.0035	-.0148	.0104	-.0007	.0302	-.0047	.0093	.0533	-.0869
326.000									.0003	.0223	.0651	-.0866
346.000		.0651	-.0250	-.0599	-.0644	-.0841	-.0723	-.0312	-.0413	-.0216	.0240	-.0864
360.000	.1530	.0895	-.0119	-.0486	-.0491	-.0531	-.0559	.0049	-.0395	-.0266	-.0137	-.0745

MACH (2) = 4.960 ALPHA (1) = 16.470 BETA = .00000 Q(PSI) = 3.0700 PO = 90.029 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1447	.1095	.0729	.0629	.0603	.0629	.0503	.1473	.0528	.0515	-.0051	-.0089
14.000		.0830	.0439	.0502	.0376	.0388	.0376	.1195	.0313	.0364	.0275	-.0127
24.000									-.0013	.0023	-.0026	-.0164
45.000	.1724	.0716	.0477	.0426	.0414	.0338	.0351	.1182	.0288	.0288	-.0039	-.0177
67.500		.0679	.0351	.0275	.0313	.0288	.0364	.1082	.0250	.0225	-.0127	-.0152
90.000	.2241	.0868	.0401	.0301	9.9990	.0225	.0313	.1094	.0212	.0187	-.0177	-.0177
112.500		.1321	.0502	.0301	.0301	.0137	.0250	.1069	.0175	.0162	-.0013	.0804
135.000	.4685	.2215	.0867	.0376	.0288	.0174	.0225	.1044	9.9990	.0099	.0011	.0805
157.500		.3400	.1510	.0503	.0439	.0275	.0313	.1107	.0515	.0212	.0162	.0779
180.000	.8213	.4622	.2417	.1057	.0830	.0578	.0653	.1435	.0603	.0540	.0603	.0779
202.500		.5857	.3188	.1447	.1170	.0843	.1019	.1787	.0991	.0981	.1057	.0779

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A087)

MACH (2) = 4.960 ALPHA (1) = 16.470

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.9989	.6371	.3500	.1648	.1321	.1195	.1207	.1988	.1157	.1169	.1258	.0779
247.500		.6069	.3298	.1510	.1295	.1056	.1069	.1875	.1044	.1031	.1308	-.0076
270.000	.8641	.5061	.2618	.1107	9.9990	.0678	.0703	.1510	.0628	.0615	.0855	-.0101
292.500		.3740	.1775	.0666	.0527	.0351	.0326	.1145	.0212	.0225	.0414	-.0114
315.000	.5150	.2594	.1031	.0313	.0250	.0212	.0250	.0981	.0162	0238	.0414	-.0152
326.000									.0187	.0313	.0376	-.0139
346.000		.0805	.0187	.0036	.0011	-.0064	-.0026	.0830	-.0101	-.0076	.0036	-.0190
360.000	.1447	.1095	.0729	.0629	.0603	.0629	.0503	.1473	.0528	.0515	-.0051	-.0089

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A088) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PSI) = 6.8640 PO = 60.031 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0640	.0195	-.0458	-.0554	-.0554	-.0537	-.0593	.0015	-.0407	-.0232	-.0114	-.0785
14.000		.0223	-.0446	-.0576	-.0649	-.0621	-.0644	-.0249	-.0508	-.0294	.0285	-.0886
24.000									-.0559	-.0317	-.0080	-.0920
45.000	.1254	.0076	-.0447	-.0605	-.0520	-.0492	-.0554	-.0216	-.0565	-.0627	-.0441	-.0909
67.500		.0037	-.0514	-.0672	-.0689	-.0672	-.0644	-.0289	-.0649	-.0683	-.0650	-.0886
90.000	.1666	.0268	-.0435	-.0678	9.9990	-.0694	-.0638	-.0306	-.0683	-.0683	-.0723	-.0886
112.500		.0894	-.0131	-.0582	-.0683	-.0723	-.0672	-.0339	-.0706	-.0694	-.0711	-.0390
135.000	.4398	.2043	.0555	-.0238	-.0323	-.0571	-.0576	-.0244	9.9990	-.0661	-.0661	-.0402
157.500		.3620	.1614	.0403	.0172	-.0041	-.0047	.0273	-.0052	-.0137	-.0114	-.0430
180.000	.8787	.5260	.2876	.1226	.0955	.0769	.0758	.1062	.0657	.0673	.0668	-.0374
202.500		.6933	.3958	.1890	.1597	.1507	.1423	.1733	.1412	.1457	.1445	-.0227
225.000	1.1378	.7632	.4527	.2296	.2020	.1874	.1851	.2110	.1783	.1857	.1823	-.0131
247.500		.7170	.4195	.2088	.1885	.1581	.1603	.1936	.1575	.1569	.2050	-.0745
270.000	.9469	.5851	.3248	.1524	9.9990	.0921	.0933	.1259	.0854	.0859	.1119	-.0740
292.500		.4096	.2004	.0640	.0381	.0195	.0127	.0471	.0043	.0127	.0330	-.0686
315.000	.5274	.2640	.0983	-.0002	-.0143	.0161	.0071	.0397	.0059	.0121	.0296	-.0875
326.000									.0094	.0262	.0414	-.0898
346.000		.0200	-.0481	-.0706	-.0734	-.0785	-.0779	-.0261	-.0390	-.0171	.0335	-.0875
360.000	.0640	.0195	-.0458	-.0554	-.0554	-.0537	-.0593	.0015	-.0407	-.0232	-.0114	-.0795

MACH (2) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(PSI) = 3.0710 PO = 90.040 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1820	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0931	.0930	.0766	.0729	.0691	.0766	.0590	.0691	.0565	.0640	-.0089	-.0039
14.000		.0766	.0562	.0628	.0452	.0477	.0464	.0729	.0389	.0477	.0426	-.0064
24.000									.0036	.0074	.0023	-.0102
45.000	.1182	.0653	.0477	.0515	.0439	.0401	.0376	.0383	.0300	.0363	-.0089	-.0127
67.500		.0615	.0452	.0401	.0363	.0351	.0426	.0313	.0313	.0326	-.0114	-.0076
90.000	.1661	.0691	.0376	.0351	9.9990	.0326	.0363	.0300	.0212	.0275	-.0190	-.0089
112.500		.1132	.0489	.0338	.0326	.0212	.0313	.0275	.0212	.0237	.0011	-.0013
135.000	.4307	.2114	.0892	.0452	.0313	.0212	.0263	.0237	9.9990	.0187	.0036	-.0026
157.500		.3613	.1698	.0766	.0552	.0439	.0439	.0414	.0703	.0361	.0300	-.0064
180.000	.8931	.5276	.2870	.1396	.1081	.0988	.0955	.0988	.1018	.0993	.1006	-.0051
202.500		.6915	.4005	.2027	.1649	.1548	.1598	.1611	.1649	.1737	.1787	.0036

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A08B)

MACH (2) = 4.960 ALPHA (1) = 20.490

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.1460	.7643	.4570	.2391	.2026	.1850	.1976	.1988	.2013	.2127	.2127	.0061
247.500		.7152	.4218	.2177	.1850	.1661	.1698	.1749	.1761	.1824	.2241	.0049
270.000	.8394	.5867	.3361	.1636	9.9990	.1069	.1119	.1157	.1107	.1182	.1421	-.0026
292.500		.4143	.2153	.0943	.0691	.0565	.0477	.0490	.0401	.0477	.0678	-.0064
315.000	.5126	.2682	.1309	.0439	.0288	.0326	.0351	.0301	.0275	.0389	.0427	-.0076
326.000									.0338	.0414	.0464	-.0089
346.000		.0578	.0237	.0086	.0036	-.0013	-.0001	.0049	-.0051	.0023	-.0013	-.0101
360.000	.0931	.0930	.0766	.0729	.0691	.0766	.0590	.0691	.0565	.0640	-.0089	-.0039

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A089) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.6650 PO = 60.044 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0527	-.0317	-.0486	-.0554	-.0531	-.0542	-.0599	-.0564	-.0413	-.0266	-.0143	-.0807
14.000		.0020	-.0486	-.0871	-.0633	-.0833	-.0644	-.0821	-.0468	-.0272	.0538	-.0852
24.000									-.0588	-.0334	-.0007	-.0881
45.000	.0820	-.0114	-.0503	-.0810	-.0486	-.0821	-.0644	-.0887	-.0810	-.0855	-.0345	-.0852
67.500		-.0182	-.0599	-.0678	-.0678	-.0706	-.0667	-.0678	-.0650	-.0706	-.0678	-.0847
90.000	.1095	-.0030	-.0599	-.0700	9.9990	-.0706	-.0878	-.0700	-.0700	-.0700	-.0789	-.0870
112.500		.0806	-.0255	-.0810	-.0889	-.0889	-.0667	-.0728	-.0728	-.0717	-.0740	-.0782
135.000	.4093	.1913	.0527	-.0221	-.0390	-.0576	-.0571	-.0618	9.9990	-.0638	-.0644	-.0768
157.500		.3812	.1828	.0578	.0335	.0110	.0116	.0082	.0172	.0087	.0099	-.0774
180.000	.9435	.5846	.3412	.1643	.1361	.1209	.1175	.1175	.1130	.1164	.1130	-.0661
202.500		.7942	.4865	.2555	.2234	.2229	.2121	.2127	.2172	.2240	.2229	-.0481
225.000	1.2629	.8871	.5603	.3102	.2848	.2724	.2713	.2662	.2685	.2769	.2684	-.0324
247.500		.8280	.5164	.2820	.2634	.2290	.2347	.2392	.2375	.2364	.3085	-.0638
270.000	1.0100	.6584	.3898	.1936	9.9990	.1395	.1417	.1428	.1383	.1400	.1671	-.0712
292.500		.4364	.2296	.0871	.0634	.0420	.0324	.0330	.0285	.0358	.0595	-.0858
315.000	.5170	.2629	.1028	.0037	-.0120	.0161	.0155	.0085	.0178	.0262	.0369	-.0869
326.000									.0223	.0409	.0493	-.0914
346.000		-.0114	-.0621	-.0779	-.0762	-.0802	-.0796	-.0655	-.0430	-.0221	.0057	-.0915
360.000	.0527	-.0317	-.0486	-.0554	-.0531	-.0542	-.0599	-.0554	-.0413	-.0266	-.0143	-.0807

MACH (2) = 4.960 ALPHA (1) = 24.610 BETA = .00000 Q(PSI) = 3.0700 PO = 90.024 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0666	.0716	.0628	.0578	.0578	.0552	.0464	.0578	.0489	.0527	-.0089	-.0051
14.000		.0716	.0427	.0490	.0376	.0313	.0338	.0389	.0326	.0389	.0364	-.0089
24.000									-.0001	.0011	-.0026	-.0114
45.000	.0666	.0729	.0414	.0414	.0401	.0326	.0326	.0338	.0263	.0313	-.0039	-.0101
67.500		.0742	.0326	.0263	.0301	.0275	.0338	.0288	.0275	.0263	-.0127	-.0127
90.000	.1283	.0716	.0182	.0250	9.9990	.0212	.0263	.0263	.0175	.0212	-.0190	-.0127
112.500		.0817	.0351	.0250	.0225	.0124	.0225	.0238	.0162	.0162	-.0013	.0011
135.000	.4208	.2115	.0842	.0389	.0288	.0137	.0225	.0250	9.9990	.0162	.0023	-.0039
157.500		.3818	.1928	.0888	.0653	.0477	.0515	.0585	.0893	.0590	.0515	-.0026
180.000	.9523	.5945	.3378	.1737	.1409	.1283	.1372	.1480	.1472	.1510	.1489	.0036
202.500		.7872	.4723	.2988	.2153	.2178	.2329	.2430	.2488	.2556	.2518	.0124

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A089)

MACH (2) = 4.980 ALPHA (1) = 24.510

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.2584	.8780	.5529	.3072	.2682	.2682	.2909	.2997	.2972	.3085	.2997	.0200
247.500		.8301	.5128	.2783	.2442	.2354	.2480	.2644	.2605	.2669	.3110	.0049
270.000	.9760	.6800	.3868	.1984	9.9990	.1422	.1573	.1849	.1824	.1687	.1976	-.0039
292.500		.4395	.2348	.1031	.0742	.0628	.0628	.0704	.0828	.0868	.1044	-.0127
315.000	.4838	.2708	.1196	.0402	.0276	.0377	.0377	.0388	.0388	.0503	.0668	-.0101
328.000									.0351	.0477	.0990	-.0177
346.000		.0452	.0137	.0023	.0011	-.0064	-.0039	.0074	-.0064	-.0001	-.0001	-.0190
360.000	.0868	.0716	.0628	.0578	.0578	.0552	.0464	.0578	.0489	.0527	-.0089	-.0051

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (RIA090) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
NOUNT = 1.000 PHI = 45.000

MACH (1) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(PSI) = 6.8650 PO = 60.03R P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	-.0143	-.0424	-.0497	-.0531	-.0520	-.0497	-.0559	-.0520	-.0447	-.0402	-.0402	-.0802
14.000		-.0143	-.0576	-.0565	-.0627	-.0621	-.0610	-.0616	-.0514	-.0357	.0212	-.0886
24.000									-.0661	-.0469	-.0317	-.0864
45.000	.0494	-.0244	-.0520	-.0599	-.0525	-.0604	-.0632	-.0649	-.0638	-.0576	-.0323	-.0852
67.500		-.0334	-.0605	-.0689	-.0678	-.0661	-.0661	-.0667	-.0638	-.0650	-.0627	-.0836
90.000	.0617	-.0278	-.0610	-.0706	9.9990	-.0689	-.0650	-.0667	-.0667	-.0661	-.0712	-.0847
112.500		.0403	-.0334	-.0627	-.0700	-.0695	-.0667	-.0695	-.0683	-.0678	-.0706	-.0762
135.000	.3772	.1795	.0499	-.0221	-.0390	-.0514	-.0520	-.0543	9.9990	-.0548	-.0570	-.0790
157.500		.3958	.2009	.0741	.0499	.0307	.0341	.0318	.0431	.0341	.0364	-.0717
180.000	.9959	.6437	.3975	.2093	.1828	.1767	.1716	.1761	.1710	.1750	.1699	-.0537
202.500		.9001	.5829	.3316	.3017	.3113	.3045	.3034	.3079	.3158	.3119	-.0312
225.000	1.3824	1.0150	.6809	.4048	.3795	.3789	.3846	.3739	.3744	.3840	.3727	-.0086
247.500		.9395	.6266	.3631	.3474	.3265	.3316	.3361	.3316	.3293	.4127	-.0481
270.000	1.0724	.7294	.4589	.2476	9.9990	.1924	.2026	.2054	.1986	.2026	.2303	-.0599
292.500		.4612	.2561	.1102	.0781	.0702	.0606	.0634	.0595	.0685	.0910	-.0819
315.000	.5074	.2572	.1023	.0076	-.0069	.0330	.0279	.0189	.0335	.0426	.0606	-.0841
326.000									.0380	.0617	.0685	-.0875
346.000		-.0261	-.0672	-.0807	-.0779	-.0779	-.0774	-.0678	-.0548	-.0447	-.0374	-.0920
360.000	-.0143	-.0424	-.0497	-.0531	-.0520	-.0497	-.0559	-.0520	-.0447	-.0402	-.0402	-.0802

MACH (2) = 4.960 ALPHA (1) = 28.540 BETA = .00000 Q(PSI) = 3.0700 PO = 90.028 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.0338	.0603	.0678	.0565	.0578	.0640	.0452	.0653	.0439	.0515	-.0127	-.0064
14.000		.0515	.0351	.0477	.0363	.0401	.0326	.0300	.0288	.0376	.0275	-.0114
24.000									-.0013	-.0076	-.0114	-.0127
45.000	.0540	.0464	.0364	.0401	.0389	.0369	.0275	.0250	.0238	.0301	-.0127	-.0139
67.500		.0369	.0275	.0263	.0288	.0301	.0301	.0187	.0238	.0250	-.0139	-.0139
90.000	.0817	.0414	.0238	.0263	9.9990	.0225	.0275	.0175	.0149	.0200	-.0202	-.0127
112.500		.0767	.0288	.0238	.0238	.0162	.0212	.0137	.0149	.0162	-.0013	-.0076
135.000	.3879	.1913	.0729	.0369	.0300	.0250	.0225	.0187	9.9990	.0200	.0011	-.0139
157.500		.3992	.2102	.1019	.0805	.0691	.0691	.0691	.1157	.0754	.0704	-.0101
180.000	1.0140	.6474	.3904	.2165	.1838	.1876	.1913	.1951	.1984	.2039	.2039	.0023
202.500		.8994	.5731	.3312	.2934	.3236	.3274	.3261	.3400	.3463	.3438	.0225

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A090)

MACH (2) = 4.960 ALPHA (1) = 28.540

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	1.3970	1.0162	.6711	.4003	.3651	.3966	.4079	.4016	.4041	.4180	.4068	.0351
247.500		.9384	.6197	.3639	.3362	.3450	.3564	.3602	.3589	.3614	.4408	.0124
270.000	1.0606	.7180	.4483	.2518	9.9990	.2115	.2203	.2253	.2241	.2329	.2694	.0086
292.500		.4597	.2606	.1283	.0956	.0893	.0880	.0905	.0905	.0981	.1409	-.0051
315.000	.4912	.2606	.1195	.0452	.0313	.0553	.0452	.0439	.0527	.0716	.0981	-.0101
326.000									.0464	.0716	.0868	-.0076
346.000		.0288	.0112	.0023	.0036	-.0026	-.0039	.0011	-.0089	-.0039	.0074	-.0139
360.000	.0338	.0603	.0578	.0565	.0578	.0640	.0452	.0653	.0439	.0515	-.0127	-.0064

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A091) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1096.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = -8.360 BETA = .00000 Q(PSI) = 6.8650 PO = 60.038 P = .81000

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6978	.3920	.1640	.0300	.0182	-.0155	.0008	.0002	.0008	.0649	.1783	-.0667
14.000		.3464	.1413	.0150	.0071	-.0091	-.0041	-.0041	-.0046	.0607	.1971	-.0751
24.000									.0076	.0629	.1845	-.0858
45.000	.5262	.2362	.0808	-.0132	-.0075	-.0481	-.0486	-.0515	-.035.	-.0115	-.0103	-.0864
67.500		.1885	.0488	-.0312	-.0306	-.0357	-.0464	-.0492	-.0[illegible]4	-.0193	-.0058	-.0774
90.000	.3784	.1457	.0217	-.0435	9.9990	-.0419	-.0435	-.0413	-.0317	-.0244	.0003	-.0706
112.500		.1232	.0054	-.0497	-.0469	-.0395	-.0232	-.0210	-.0215	-.0182	.0003	-.0667
135.000	.3316	.1169	.0042	-.0514	-.0458	-.0306	-.0159	-.0081	9.9990	-.0086	-.0080	-.0734
157.500		.1225	.0054	-.0509	-.0458	-.0362	-.0351	-.0362	-.0024	-.0261	-.0261	-.0706
180.000	.3733	.1378	.0178	-.0464	-.0492	-.0396	-.0368	-.0390	-.0312	-.0300	-.0300	-.0757
202.500		.1812	.0426	-.0345	-.0424	-.0441	-.0407	-.0452	-.0441	-.0407	-.0435	-.0757
225.000	.5079	.2375	.0752	-.0154	-.0278	-.0351	-.0362	-.0458	-.0509	-.0492	-.0509	-.0757
247.500		.3012	.1152	.0071	-.0075	-.0131	-.0165	-.0238	-.0312	-.0295	-.0081	-.0745
270.000	.6852	.3622	.1565	.0308	9.9990	.0094	.0116	-.0001	-.0058	-.0018	.0139	-.0796
292.[illegible]0		.4000	.1835	.0477	.0404	.0308	.0302	.0144	.0184	.0122	.0589	-.0864
315.000	.7818	.4223	.1998	.0561	.0471	.0533	.0285	.0183	.0234	.0144	.1276	-.0858
326.000									.0679	.0521	.0927	-.0785
346.000		.4347	.2003	.0651	.0454	-.0165	.0166	.0042	.0273	.1012	.1795	-.0852
360.000	.6978	.3920	.1640	.0300	.0182	-.0155	.0008	.0002	.0008	.0649	.1783	-.0667

MACH (2) = 4.960 ALPHA (1) = -8.310 BETA = .00000 Q(PSI) = 3.0700 PO = 90 022 P = .17800

SECTION (1)ANK — DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.6411	.3753	.1661	.0842	.0754	.0716	.0641	.0653	.0679	.0868	.1246	.0011
14.000		.3237	.1410	.0729	.0616	.0477	.0540	.0465	.0528	.0692	.1372	-.0039
24.000									.0338	.0464	.1157	-.0033
45.000	.5126	.2354	.1006	.0540	.0477	.0364	.0351	.0301	.0351	.0439	.0175	-.0089
67.500		.1876	.0742	.0364	.0301	.0288	.0389	.0225	.0275	.0313	-.0013	-.0064
90.000	.3740	.1472	.0578	.0326	9.9990	.0225	.0328	.0225	.0200	.0275	-.0013	-.0051
112.500		.1321	.0477	.0263	.0187	.0238	.0288	.0238	.0238	.0275	.0099	-.0051
135.000	.3299	.1271	.0490	.0250	.0175	.0187	.0283	.0238	9.9990	.0238	.0074	-.0064
157.500		.1321	.0414	.0187	.0137	.0182	.0212	.0149	.1031	.0200	.0011	-.0064
180.000	.3728	.1460	.0464	.0175	.0036	.0137	.0175	.0112	.0200	.0112	.0011	-.0076
202.500		.1850	.0616	.0238	.0074	.0086	.0112	.0061	.0086	.0112	-.0001	-.0076

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (RIA091)

MACH (2) = 4.960 ALPHA (1) = -8.310

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8800	.8920	.9230	.9540
THETA												
225.000	.4950	.2379	.0905	.0275	.0124	.0137	.0149	.0086	.0112	.0124	-.0001	-.0089
247.500		.2909	.1208	.0376	.0175	.0162	.0187	.0099	.0099	.0112	.0124	-.0051
270.000	.6587	.3463	.1548	.0527	9.9990	.0250	.0301	.0238	.0200	.0238	.0250	-.0114
292.500		.3816	.1800	.0628	.0502	.0389	.0414	.0338	.0301	.0313	.0515	-.0076
315.000	.7419	.3967	.1850	.0666	.0527	.0477	.0490	.0313	.0238	.0389	.0868	-.0139
326.000									.0540	.0515	.0842	-.0114
346.000		.4068	.1964	.0754	.0515	.0301	.0313	.0250	.0414	.0641	.1321	-.0139
360.000	.6411	.3753	.1661	.0842	.0754	.0716	.0641	.0653	.0679	.0868	.1246	.0011

MSFC 598 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A092) (18 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = -4.330 BETA = .00000 Q(PSI) = 6.8640 PO = 60.029 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5916	.3198	.1158	.0042	-.0041	-.0266	-.0137	-.0120	-.0081	.0657	.1503	-.0661
14.000		.2961	.1073	-.0013	-.0019	-.0272	-.0199	-.0103	-.0086	.0566	.1803	-.0628
24.000									-.0018	.0503	.1599	-.0813
45.000	.5350	.2452	.0802	-.0132	-.0064	-.0137	-.0329	-.0272	-.0216	-.0025	.0528	-.0830
67.500		.2195	.0673	-.0227	-.0210	-.0120	-.0266	-.0255	-.0143	-.0165	.0336	-.0756
90.000	.4880	.1952	.0493	-.0289	9.9990	-.0255	-.0148	-.0210	-.0182	-.0120	.0054	-.0649
112.500		.1812	.0414	-.0345	-.0357	-.0244	-.0176	-.0126	-.0126	-.0109	.0105	-.0655
135.000	.4310	.1789	.0386	-.0362	-.0357	-.0210	-.0159	-.0103	9.9990	-.0047	-.0048	-.0650
157.500		.1795	.0387	-.0362	-.0362	-.0232	-.0170	-.0182	.0223	-.0108	-.0103	-.0655
180.000	.4541	.1868	.0482	-.0312	-.0340	-.0244	-.0182	-.0159	-.0131	-.0131	-.0153	-.0694
202.500		.2145	.0590	-.0255	-.0317	-.0249	-.0215	-.0204	-.0193	-.0159	-.0193	-.0683
225.000	.5206	.2467	.0787	-.0148	-.0232	-.0227	-.0193	-.0215	-.0210	-.0187	-.0198	-.0678
247.500		.2765	.0996	-.0029	-.0125	-.0125	-.0103	-.0114	-.0153	-.0153	-.0001	-.0711
270.000	.6127	.3030	.1159	.0065	9.9990	-.0018	-.0001	-.0035	-.0097	-.0063	.0047	-.0757
292.500		.3177	.1255	.0122	.0133	.0094	.0122	-.0024	.0015	-.0048	.0330	-.0824
315.000	.6808	.3881	.1328	.0158	.0195	.0280	.0032	-.0041	-.0012	-.0080	.0843	-.0768
326.000									.0353	.0201	.0629	-.0841
346.000		.3515	.1430	.0283	.0189	-.0368	-.0048	-.0108	.0054	.0764	.1328	-.0785
360.000	.5918	.3199	.1158	.0042	-.0041	-.0268	-.0137	-.0120	-.0081	.0657	.1503	-.0661

MACH (2) = 4.880 ALPHA (1) = -4.290 BETA = .00000 Q(PSI) = 3.0700 PO = 90.032 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5580	.2972	.1334	.0767	.0754	.0718	.0618	.0603	.0653	.0767	.0691	.0049
14.000		.2720	.1170	.0666	.0578	.0502	.0502	.0439	.0527	.0653	.0742	-.0051
24.000									.0263	.0376	.0742	-.0076
45.000	.5176	.2366	.0968	.0540	.0464	.0363	.0401	.0338	.0326	.0439	.0313	-.0101
67.500		.2139	.0880	.0401	.0351	.0338	.0426	.0300	.0363	.0389	.0200	-.0114
90.000	.4433	.1925	.0779	.0376	9.9990	.0275	.0363	.0288	.0275	.0326	.0086	-.0076
112.500		.1812	.0666	.0326	.0237	.0237	.0326	.0263	.0275	.0300	.0175	-.0039
135.000	.4194	.1787	.0666	.0288	.0174	.0212	.0300	.0250	9.9990	.0275	.0099	-.0051
157.500		.1799	.0640	.0263	.0187	.0237	.0263	.0212	.1207	.0263	.0036	-.0064
180.000	.4383	.1875	.0691	.0263	.0137	.0137	.0225	.0187	.0275	.0162	.0049	-.0076
202.500		.2051	.0754	.0237	.0124	.0124	.0174	.0061	.0187	.0174	.0049	-.0089

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A092)

MACH (2) = 4.960 ALPHA (1) = -4.290

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5013	.2342	.0830	.0263	.0112	.0124	.0175	.0112	.0124	.0112	.0061	-.0089
247.500		.2594	.0968	.0275	.0099	.0149	.0149	.0112	.0099	.0112	.0112	-.0039
270.000	.5806	.2871	.1170	.0351	9.9990	.0137	.0225	.0162	.0149	.0149	.0124	-.0064
292.500		.3009	.1296	.0364	.0275	.0200	.0263	.0212	.0175	.0200	.0238	-.0076
315.000	.6260	.3035	.1246	.0376	.0288	.0263	.0288	.0162	.0086	.0238	.0464	-.0089
326.000									.0263	.0326	.0490	-.0139
346.000		.3261	.1384	.0427	.0313	.0112	.0137	.0112	.0187	.0389	.1019	-.0177
360.000	.5580	.2972	.1334	.0757	.0754	.0716	.0616	.0603	.0653	.0767	.0691	.0049

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A093) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 6.8630 PO = 60.022 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.5122	.2600	.0893	-.0035	.0172	.0071	-.0109	-.0002	.0166	.0544	.1790	-.0548
14.000		.2583	.0904	-.0019	.0195	.0059	-.0137	-.0019	.0121	.0662	.1621	-.0593
24.000									.0156	.0680	.1435	-.0706
45.000	.5443	.2514	.0881	-.0042	.0098	.0138	-.0058	-.0019	-.0002	.0115	.1142	-.0666
67.500		.2583	.0950	-.0013	.0014	.0093	-.0007	.0037	.0099	-.0007	.0539	-.0604
90.000	.5437	.2574	.0934	-.0007	9.9990	.0065	.0049	.0049	.0049	.0032	.0201	-.0593
112.500		.2563	.0911	-.0029	-.0052	.0060	.0003	.0049	.0054	.0015	.0235	-.0514
135.000	.5477	.2619	.0945	-.0024	-.0041	.0049	.0009	.0071	9.9990	.0037	-.0001	-.0469
157.500		.2563	.0911	-.0024	-.0058	.0037	-.0007	.0049	.0184	.0020	-.0012	-.0424
180.000	.5432	.2495	.0917	-.0018	-.0052	.0043	-.0001	.0049	.0071	.0020	-.0029	-.0424
202.500		.2579	.0928	-.0024	-.0058	.0060	-.0018	.0043	.0060	.0032	-.0007	-.0424
225.000	.5420	.2613	.0939	-.0012	-.0041	.0049	-.0007	.0049	.0065	.0032	.0009	-.0463
247.500		.2613	.0945	-.0007	-.0024	.0065	.0015	.0077	.0077	.0049	.0218	-.0508
270.000	.5482	.2591	.0928	-.0007	9.9990	.0054	.0043	.0094	.0049	.0043	.0184	-.0542
292.500		.2517	.0917	-.0024	.0082	.0099	.0094	.0049	.0094	.0003	.0421	-.0559
315.000	.5612	.2534	.0917	-.0035	.0077	.0206	-.0024	-.0001	.0032	-.0046	.0838	-.0599
326.000									.0347	.0257	.0657	-.0621
346.000		.2831	.1062	.0076	.0200	-.0295	-.0075	-.0024	.0302	.0634	.1148	-.0593
360.000	.5122	.2600	.0893	-.0035	.0172	.0071	-.0109	-.0002	.0166	.0544	.1790	-.0548

MACH (2) = 4.960 ALPHA (1) = -.280 BETA = .00000 Q(PSI) = 3.0710 PO = 90.044 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4847	.2518	.1309	.0943	.1006	.1107	.0792	.0855	.0956	.0905	.1031	.0212
14.000		.2555	.1232	.0892	.0855	.0955	.0703	.0741	.0804	.0855	.1497	.0162
24.000									.0489	.0640	.1247	.0125
45.000	.5351	.2619	.1246	.0830	.0792	.0868	.0653	.0716	.0704	.0704	.0842	.0124
67.500		.2706	.1283	.0741	.0703	.0817	.0691	.0666	.0729	.0628	.0552	.0149
90.000	.5482	.2731	.1295	.0729	9.9990	.0766	.0640	.0653	.0653	.0565	.0452	.0187
112.500		.2744	.1258	.0691	.0615	.0703	.0578	.0640	.0640	.0527	.0414	.0300
135.000	.5527	.2719	.1232	.0640	.0527	.0678	.0515	.0590	9.9990	.0489	.0326	.0288
157.500		.2706	.1258	.0640	.0565	.0653	.0515	.0552	.1081	.0477	.0326	.0326
180.000	.5477	.2617	.1194	.0602	.0527	.0602	.0502	.0502	.0565	.0388	.0326	.0338
202.500		.2618	.1169	.0578	.0477	.0615	.0439	.0489	.0515	.0426	.0326	.0338

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A093)

MACH (2) = 4.960 ALPHA (1) = -.280

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5356	.2618	.1195	.0552	.0464	.0603	.0426	.0477	.0515	.0376	.0313	.0313
247.500		.2580	.1119	.0603	.0426	.0603	.0351	.0464	.0464	.0376	.0414	.0439
270.000	.5225	.2555	.1119	.0502	9.9990	.0590	.0401	.0477	.0452	.0376	.0401	.0376
292.500		.2505	.1094	.0464	.0477	.0628	.0401	.0464	.0452	.0363	.0478	.0352
315.000	.5490	.2492	.1119	.0477	.0477	.0452	.0401	.0452	.0376	.0351	.0628	.0326
326.000									.0503	.0515	.0640	.0313
346.000		.2756	.1258	.0527	.0552	.0527	.0351	.0426	.0515	.0552	.0943	.0338
360.000	.4847	.2518	.1309	.0943	.1006	.1107	.0792	.0855	.0956	.0905	.1031	.0212

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A094) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 3.770 BETA = .00000 Q(PSI) = 6.8640 PO = 60.027 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4364	.1976	.0561	-.0176	.0020	-.0001	-.0148	-.0086	.0026	.0680	.1378	-.0593
14.000		.2123	.0612	-.0176	.0049	-.0148	-.0193	-.0108	.0009	.0567	.1383	-.0867
24.000									.0009	.0392	.1265	-.0723
45.000	.5389	.2488	.0865	-.0047	.0048	.0127	.0020	-.0041	.0003	.0009	.1231	-.0723
67.500		.2856	.1108	.0060	-.0001	.0116	.0009	.0032	.0111	.0032	.0488	-.0678
90.000	.6218	.3147	.1293	.0178	9.9990	.0121	.0104	.0099	.0104	.0121	.0324	-.0633
112.500		.3335	.1413	.0251	.0167	.0173	.0105	.0122	.0133	.0116	.0313	-.0514
135.000	.6668	.3493	.1508	.0280	.0184	.0184	.0133	.0133	9.9990	.0116	.0127	-.0469
157.500		.3355	.1423	.0251	.0144	.0178	.0104	.0110	.0279	.0087	.0082	-.0447
180.000	.6218	.3070	.1306	.0195	.0105	.0122	.0054	.0054	.0071	.0026	-.0002	-.0430
202 500		.2901	.1153	.0088	.0020	.0049	-.0024	-.0018	-.0001	-.0041	-.0069	-.0447
225.000	.5372	.2619	.0956	-.0018	-.0097	-.0029	-.0097	-.0074	-.0046	-.0080	-.0092	-.0464
247.500		.2303	.0781	-.0120	-.0120	-.0080	-.0103	-.0052	-.0029	-.0046	-.0030	-.0452
270.000	.4719	.2066	.0607	-.0198	9.9990	-.0063	-.0069	-.0046	-.0035	-.0046	.0031	-.0514
292.500		.1864	.0516	-.0255	-.0108	.0003	-.0041	-.0018	.0043	-.0035	.0358	-.0514
315.000	.4465	.1812	.0448	-.0289	-.0159	.0003	-.0148	-.0064	-.0081	.0003	.0933	-.0497
326.000									.0251	.0093	.0792	-.0531
346.000		.2123	.0652	-.0198	-.0035	-.0238	-.0114	-.0080	.0049	.0618	.1265	-.0599
360.000	.4364	.1976	.0561	-.0176	.0020	-.0001	-.0148	-.0086	.0026	.0680	.1378	-.0593

MACH (2) = 4.960 ALPHA (1) = 3.730 BETA = .00000 Q(PSI) = 3.0710 PO = 90.045 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.4243	.2039	.1183	.0956	.0981	.1120	.0779	.0905	.0918	.0868	.0578	.0200
14.000		.2165	.1107	.0892	.0779	.0892	.0866	.0766	.0779	.0779	.0892	.0149
24.000									.0401	.0426	.0540	.0124
45.000	.5281	.2555	.1245	.0804	.0729	.0829	.0640	.0729	.0729	.0653	.0779	.0111
67.500		.2920	.1384	.0779	.0868	.0829	.0891	.0691	.0729	.0691	.0552	.0162
90.000	.6259	.3035	-.3971	.0823	9.9990	.1159	.2205	.0755	.0802	.0717	.0489	.0187
112.500		.3468	.1808	.0042	.0891	.0768	.0815	.0891	.0891	.0803	.0477	.0338
135.000	.6702	.3983	.1749	.0059	.0868	.0703	.0590	.0868	9.9990	.0540	.0401	.0351
157.500		.3462	.1036	.0792	.0815	.0868	.0585	.0590	.1132	.0489	.0351	.0363
180.000	.6308	.3185	.1573	.0741	.0803	.0640	.0489	.0565	.0815	.0428	.0338	.0389
202.500		.3048	.1348	.0640	.0489	.0565	.0414	.0477	.0477	.0376	.0326	.0428

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A054)

MACH (2) = 4.860 ALPHA (1) = 3.730

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.8351	.2843	.1220	.0552	.0439	.0540	.0378	.0452	.0477	.0383	.0338	.0401
247.500		.2388	.1031	.0502	.0378	.0477	.0351	.0428	.0438	.0328	.0328	.0464
270.000	.4694	.2089	.0905	.0414	8.9990	.0477	.0313	.0428	.0414	.0313	.0313	.0478
292.500		.1938	.0817	.0376	.0363	.0515	.0351	.0426	.0401	.0351	.0338	.0464
315.000	.4366	.1850	.0779	.0363	.0351	.0439	.0326	.0401	.0363	.0326	.0502	.0351
326.000									.0414	.0452	.0527	.0326
348.000		.2089	.0880	.0376	.0401	.0439	.0300	.0401	.0401	.0414	.0603	.0328
360.000	.4243	.2039	.1183	.0956	.0981	.1120	.0779	.0905	.0918	.0868	.0578	.0200

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A095) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = .000
MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 7.800 BETA = .00000 Q(PSI) = 8.8840 PO = 80.027 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3543	.1432	.0222	-.0239	-.0110	-.0070	-.0233	-.0200	-.0065	.0267	.0979	-.0576
14.000		.1713	.0396	-.0233	-.0143	-.0183	-.0329	-.0262	-.0031	.0013	.0673	-.0695
24.000									-.0029	.0026	.0516	-.0728
45.000	.5164	.2389	.0805	-.0068	-.0068	.0077	-.0012	.0004	-.0001	.0139	.0449	-.0734
67.500		.3081	.1272	.0156	.0026	.0105	-.0001	-.0007	.0032	.0133	.0173	-.0734
90.000	.6970	.3707	.1678	.0404	9.9990	.0229	.0139	.0133	.0133	.0094	.0347	-.0740
112.500		.4186	.1999	.0607	.0483	.0381	.0291	.0308	.0302	.0251	.0539	-.0627
135.000	.7923	.4409	.2116	.0662	.0493	.0454	.0364	.0358	9.9990	.0307	.0324	-.0565
157.500		.4206	.2031	.0623	.0426	.0420	.0313	.0330	.0499	.0262	.0246	-.0548
180.000	.6999	.3645	.1728	.0449	.0285	.0274	.0139	.0144	.0133	.0065	.0043	-.0525
202.500		.3171	.1362	.0218	.0088	.0049	-.0074	-.0091	-.0103	-.0159	-.0210	-.0508
225.000	.5246	.2546	.0945	-.0018	-.0131	-.0165	-.0283	-.0294	-.0300	-.0334	-.0356	-.0503
247.500		.1952	.0572	-.0227	-.0278	-.0238	-.0312	-.0266	-.0250	-.0289	-.0294	-.0480
270.000	.3879	.1570	.0347	-.0339	9.9990	-.0193	-.0272	-.0255	-.0232	-.0289	-.0193	-.0559
292.500		.1288	.0178	-.0424	-.0233	-.0052	-.0227	-.0193	-.0193	-.0266	.0009	-.0616
315.000	.3369	.1198	.0099	-.0469	-.0322	-.0091	-.0210	-.0086	-.0131	-.0080	.0883	-.0632
326.000									.0127	-.0012	.0764	-.0638
346.000		.1475	.0251	-.0339	-.0227	-.0232	-.0249	-.0198	-.0024	.0466	.1063	-.0582
360.000	.3543	.1422	.0222	-.0239	-.0110	-.0070	-.0233	-.0200	-.0065	.0267	.0979	-.0576

MACH (2) = 4.960 ALPHA (1) = 7.750 BETA = .00000 Q(PSI) = 3.0700 PO = 90.021 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.3513	.1625	.1070	.0894	.0906	.1108	.0730	.0818	.0906	.0818	.0439	.0200
14.000		.1838	.1031	.0842	.0729	.0817	.0653	.0666	.0754	.0716	.0805	.0124
24.000									.0288	.0275	.0540	.0112
45.000	.5113	.2468	.1208	.0817	.0691	.0842	.0653	.0666	.0704	.0666	.0477	.0074
67.500		.3148	.1485	.0792	.0653	.0754	.0679	.0603	.0691	.0628	.0502	.0099
90.000	.7041	.3803	.1838	.0905	9.9990	.0767	.0679	.0641	.0691	.0578	.0565	.0124
112.500		.4282	.2165	.1019	.0830	.0855	.0691	.0716	.0716	.0666	.0666	.0238
135.000	.7986	.4509	.2291	.1057	.0817	.0868	.0691	.0729	9.9990	.0653	.0540	.0225
157.500		.4282	.2178	.0981	.0754	.0792	.0628	.0653	.1460	.0616	.0515	.0263
180.000	.6965	.3778	.1976	.0893	.0653	.0679	.0553	.0565	.0691	.0477	.0351	.0263
202.500		.3236	.1598	.0691	.0540	.0603	.0401	.0439	.0515	.0389	.0263	.0313

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A095)

MACH (2) = 4.960 ALPHA (1) = 7.750

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0559	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.5164	.2568	.1233	.0527	.0401	.0464	.0313	.0338	.0452	.0301	.0238	.0288
247.500		.2014	.0918	.0414	.0275	.0401	.0250	.0326	.0401	.0263	.0238	.0414
270.000	.3753	.1636	.0666	.0301	9.9990	.0414	.0238	.0326	.0376	.0250	.0212	.0414
292.500		.1409	.0603	.0288	.0338	.0427	.0275	.0326	.0389	.0275	.0250	.0389
315.000	.3261	.1271	.0477	.0250	.0250	.0376	.0250	.0313	.0313	.0288	.0338	.0288
326.000									.0313	.0326	.0427	.0263
346.000		.1523	.0565	.0288	.0238	.0338	.0212	.0275	.0326	.0275	.0490	.0250
360.000	.3513	.1625	.1070	.0894	.0906	.1108	.0730	.0818	.0906	.0818	.0439	.0200

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A096) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 12.500 BETA = .00000 Q(PSI) = 6.8650 PO = 60.038 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2899	.1035	.0015	-.0339	-.0244	-.0221	-.0368	-.0424	-.0255	-.0131	.0217	-.0757
14.000		.1362	.0037	-.0322	-.0317	-.0322	-.0508	-.0492	-.0277	-.0114	.0611	-.0790
24.000									-.0266	-.0131	.0172	-.0796
45.000	.4927	.2257	.0741	-.0097	-.0176	.0093	.0031	-.0024	-.0013	.0093	.0296	-.0830
67.500		.3254	.1383	.0234	.0048	.0104	-.0058	-.0041	-.0030	.0071	-.0007	-.0830
90.000	.7637	.4263	.2026	.0634	9.9990	.0364	.0257	.0228	.0200	.0189	.0442	-.0774
112.500		.5040	.2589	.0983	.0814	.0640	.0555	.0555	.0538	.0516	.0854	-.0734
135.000	.9097	.5418	.2798	.1090	.0859	.0747	.0679	.0673	9.9990	.0634	.0645	-.0633
157.500		.5068	.2640	.1012	.0775	.0707	.0589	.0600	.0609	.0555	.0538	-.0605
180.000	.7632	.4217	.2138	.0713	.0527	.0426	.0313	.0298	.0279	.0223	.0183	-.0638
202.500		.3417	.1513	.0324	.0144	.0076	-.0069	-.0086	-.0131	-.0171	-.0204	-.0627
225.000	.5034	.2465	.0921	-.0030	-.0176	-.0278	-.0413	-.0435	-.0469	-.0520	-.0543	-.0616
247.500		.1676	.0409	-.0306	-.0402	-.0452	-.0497	-.0452	-.0458	-.0481	-.0469	-.0576
270.000	.3158	.1135	.0071	-.0469	9.9990	-.0402	-.0486	-.0475	-.0458	-.0469	-.0402	-.0616
292.500		.0831	-.0086	-.0548	-.0351	-.0407	-.0537	-.0571	-.0565	-.0514	-.0362	-.0678
315.000	.2522	.0747	-.0143	-.0565	-.0430	-.0182	-.0216	-.0176	-.0289	-.0182	.0538	-.0672
326.000									.0116	-.0159	.0364	-.0757
346.000		.0978	.0803	-.0458	-.0379	-.0345	-.0334	-.0328	-.0261	-.0154	.0471	-.0717
360.000	.2899	.1035	.0015	-.0339	-.0244	-.0221	-.0368	-.0424	-.0255	-.0131	.0217	-.0757

MACH (2) = 4.960 ALPHA (1) = 12.430 BETA = .00000 Q(PSI) = 3.0700 PO = 90.022 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2921	.1283	.0868	.0754	.0729	.0981	.0603	.0691	.0691	.0628	.0301	.0124
14.000		.1536	.0805	.0704	.0540	.0717	.0515	.0528	.0553	.0528	.1334	.0098
24.000									.0238	.0225	.0389	.0049
45.000	.4937	.2392	.1157	.0729	.0641	.0805	.0603	.0603	.0628	.0578	.0452	.0023
67.500		.3337	.1611	.0779	.0603	.0716	.0590	.0540	.0603	.0515	.0439	.0023
90.000	.7621	.4320	.2190	.1031	9.9990	.2153	.0704	.0686	.0691	.0641	.0691	.0036
112.500		.5076	.2707	.1283	.0994	.1006	.0842	.0855	.0880	.0805	.1044	.0149
135.000	.9069	.5441	.2984	.1409	.1069	.1094	.0931	.0956	9.9990	.0880	.0905	.0162
157.500		.5191	.2884	.1322	.1044	.0981	.0855	.0893	.1700	.0818	.0792	.0137
180.000	.7633	.4383	.2354	.1057	.0817	.0830	.0628	.0653	.0729	.0553	.0515	.0149
202.500		.3513	.1762	.0779	.0565	.0590	.0401	.0427	.0452	.0338	.0275	.0187

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A095)

MACH (2) = 4.960 ALPHA (1) = 12.430

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4950	.2593	.1207	.0527	.0376	.0439	.0288	.0275	.0300	.0187	.0175	.0175
247.500		.1800	.0779	.0364	.0250	.0364	.0175	.0225	.0250	.0149	.0175	.0351
270.000	.3110	.1296	.0578	.0288	9.9990	.0338	.0212	.0250	.0250	.0175	.0175	.0313
292.500		.0994	.0401	.0250	.0301	.0338	.0200	.0225	.0238	.0162	.0149	.0250
315.000	.2455	.0931	.0401	.0250	.0263	.0288	.0238	.0288	.0200	.0149	.0212	.0263
326.000									.0275	.0238	.0238	.0250
346.000		.1183	.0502	.0263	.0225	.0326	.0200	.0250	.0225	.0149	.0288	.0200
360.000	.2921	.1283	.0868	.0754	.0729	.0991	.0603	.0691	.0691	.0628	.0301	.0124

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION (R1A097) (16 NOV 74)

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, TI

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 16.580 BETA = .00000 Q(PSI) = 6.8660 PO = 60.050 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2313	.0686	-.0098	-.0369	-.0312	-.0239	-.0487	-.0397	-.0340	-.0284	-.0013	-.0757
14.000		.1032	.0008	-.0389	-.0408	-.0442	-.0928	-.0470	-.0414	-.0335	.0781	-.0838
24.000									-.0514	-.0413	-.0142	-.0852
45.000	.4629	.2165	.0686	-.0126	-.0250	.0155	.0025	-.0030	.0002	.0059	.0228	-.0884
67.500		.3487	.1582	.0359	.0144	.0111	-.0052	-.0052	-.0041	.0037	-.0007	-.0852
90.000	.8351	.4910	.2516	.0955	9.9990	.0595	.0510	.0431	.0442	.0437	.0685	-.0774
112.500		.6020	.3310	.1479	.1265	.1057	.0955	.0978	.0968	.0955	.1451	-.0728
135.000	1.0449	.6561	.3877	.1685	.1395	.1299	.1164	.1188	9.9990	.1175	.1181	-.0585
157.500		.6080	.3385	.1538	.1271	.1107	.1023	.1051	.1231	.1008	.0998	-.0587
180.000	.8387	.4871	.2657	.1057	.0820	.0702	.0572	.0581	.0521	.0488	.0459	-.0681
202.500		.3699	.1727	.0465	.0245	.0144	-.0013	-.0007	-.0047	-.0088	-.0120	-.0850
225.000	.4785	.2392	.0892	-.0035	-.0216	-.0334	-.0458	-.0481	-.0514	-.0554	-.0593	-.0681
247.500		.1379	.0268	-.0390	-.0520	-.0554	-.0616	-.0599	-.0542	-.0548	-.0559	-.0616
270.000	.2465	.0748	-.0148	-.0587	9.9990	-.0542	-.0627	-.0610	-.0554	-.0576	-.0554	-.0672
292.500		.0429	-.0296	-.0628	-.0476	-.0577	-.0684	-.0588	-.0605	-.0616	-.0554	-.0694
315.000	.1800	.0369	-.0340	-.0650	-.0537	-.0204	-.0295	-.0306	-.0526	-.0497	-.0143	-.0723
326.000									-.0103	-.0328	-.0221	-.0728
346.000		.0597	-.0150	-.0555	-.0527	-.0431	-.0549	-.0662	-.0572	-.0487	-.0154	-.0745
360.000	.2313	.0685	-.0098	-.0369	-.0312	-.0239	-.0487	-.0397	-.0340	-.0284	-.0013	-.0757

MACH (2) = 4.960 ALPHA (1) = 16.470 BETA = .00000 Q(PSI) = 3.0710 PO = 90.047 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.2316	.1132	.0868	.0729	.0729	.0994	.0565	.0679	.0716	.0679	.0124	.0049
14.000		.1258	.0767	.0666	.0540	.0704	.0477	.0527	.0553	.0540	.0354	.0074
24.000									.0162	.0174	.0200	-.0001
45.000	.4621	.2253	.1089	.0678	.0578	.0842	.0590	.0603	.0615	.0628	.0401	.0011
67.500		.3525	.1724	.0855	.0678	.0766	.0615	.0578	.0640	.0565	.0464	-.0014
90.000	.8374	.4948	.2618	.1258	9.9990	.1044	.0867	.0867	.0880	.0842	.0955	.0036
112.500		.6069	.3398	.1673	.1371	.1321	.1157	.1207	.1258	.1182	.1610	.0137
135.000	1.0515	.6598	.3789	.1862	.1547	.1497	.1358	.1421	9.9990	.1409	.1421	.0162
157.500		.6145	.3525	.1736	.1409	.1409	.1207	.1295	.2265	.1258	.1232	.0137
180.000	.8399	.4973	2769	.1396	.1031	.1044	.0817	.0880	.0943	.0792	.0766	.0099
202.500		.3739	.1963	.0867	.0678	.0666	.0452	.0527	.0527	.0452	.0313	.0086

MSFC 595 (TA-2F) MCR0200 EXTERNAL TANK, TI (R1A097)

MACH (2) = 4.960 ALPHA (1) = 16.470

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1820	.2180	.3220	.5180	.8100	.7350	.8800	.8820	.8830	.8840
THETA												
225.000	.4734	.2454	.1144	.0469	.0376	.0489	.0237	.0288	.0300	.0200	.0081	.0099
247.500		.1497	.0840	.0288	.0182	.0313	.0137	.0200	.0212	.0111	.0089	.0275
270.000	.2379	.0930	.0351	.0187	8.9990	.0300	.0111	.0200	.0187	.0149	.0099	.0275
292.500		.0666	.0301	.0175	.0288	.0288	.0137	.0200	.0175	.0112	.0124	.0237
315.000	.1686	.0578	.0237	.0162	.0200	.0338	.0149	.0225	.0137	.0111	.0137	.0263
326.000									.0162	.0137	.0111	.0199
346.000		.0804	.0300	.0162	.0162	.0313	.0099	.0162	.0149	.0099	.0074	.0212
360.000	.2318	.1132	.0868	.0729	.0729	.0994	.0565	.0679	.0716	.0679	.0124	.0049

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A098) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 20.610 BETA = .00000 Q(PSI) = 6.8630 PO = 60.021 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1830	.0432	-.0227	-.0475	-.0430	-.0469	-.0582	-.0508	-.0407	-.0272	-.0165	-.0773
14.000		.0748	-.0136	-.0469	-.0503	-.0554	-.0632	-.0542	-.0379	-.0227	.0498	-.0830
24.000									-.0435	-.0272	-.0108	-.0852
45.000	.4378	.2050	.0646	-.0142	-.0277	.0189	.0043	.0003	.0032	.0150	.0386	-.0852
67.500		.3677	.1750	.0493	.0257	.0178	.0031	.0037	.0031	.0059	.0342	-.0852
90.000	.8971	.5550	.3025	.1322	9.9990	.0894	.0860	.0815	.0798	.0804	.1040	-.0683
112.500		.7072	.4158	.2066	.1824	.1559	.1503	.1554	.1554	.1537	.2089	-.0666
135.000	1.1689	.7833	.4682	.2360	.2078	.1892	.1818	.1841	9.9990	.1847	.1869	-.0446
157.500		.7113	.4251	.2138	.1840	.1688	.1586	.1637	.1806	.1603	.1593	-.0548
180.000	.9040	.5516	.3188	.1446	.1187	.1063	.0939	.0934	.0934	.0877	.0837	-.0644
202.500		.3913	.1941	.0634	.0397	.0273	.0133	.0149	.0116	.0082	.0037	-.0672
225.000	.4502	.2309	.0917	-.0012	-.0187	-.0345	-.0458	-.0452	-.0480	-.0520	-.0559	-.0650
247.500		.1103	.0122	-.0458	-.0576	-.0638	-.0706	-.0649	-.0604	-.0621	-.0627	-.0593
270.000	.1830	.0421	-.0294	-.0672	9.9990	-.0661	-.0711	-.0661	-.0616	-.0632	-.0587	-.0672
292.500		.0105	-.0469	-.0717	-.0542	-.0678	-.0717	-.0661	-.0649	-.0666	-.0565	-.0666
315.000	.1198	.0099	-.0452	-.0706	-.0587	-.0311	-.0559	-.0548	-.0655	-.0678	-.0407	-.0700
326.000									-.0339	-.0407	-.0379	-.0756
346.000		.0404	-.0215	-.0604	-.0576	-.0503	-.0740	-.0689	-.0542	-.0373	-.0143	-.0728
360.000	.1830	.0422	-.0227	-.0475	-.0430	-.0469	-.0582	-.0508	-.0407	-.0272	-.0165	-.0773

MACH (2) = 4.960 ALPHA (1) = 20.490 BETA = .00000 Q(PSI) = 3.0700 PO = 90.024 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1862	.1046	.0894	.0794	.0857	.1008	.0655	.0768	.0794	.0730	.0149	.0086
14.000		.1108	.0730	.0705	.0617	.0743	.0528	.0604	.0604	.0591	.0855	.0086
24.000									.0137	.0149	.0225	.0049
45.000	.4356	.2140	.1069	.0729	.0653	.0880	.0668	.0704	.0729	.0716	.0578	.0011
67.500		.3702	.1913	.0956	.0805	.0868	.0716	.0729	.0792	.0704	.0754	.0023
90.000	.8941	.5491	.3085	.1535	9.9990	.1183	.1132	.1195	.1246	.1183	.1460	.0099
112.500		.6953	.4143	.2078	.1901	.1762	.1699	.1838	.1926	.1863	.2454	.0212
135.000	1.1589	.7656	.4646	.2416	.2114	.2051	.2001	.2127	9.9990	.2152	.2215	.0288
157.500		.7104	.4307	.2266	.1926	.1787	.1762	.1901	.2896	.1913	.1988	.0237
180.000	.8868	.5580	.3375	.1674	.1384	.1321	.1170	.1283	.1384	.1246	.1195	.0187
202.500		.3954	.2140	.0968	.0792	.0742	.0553	.0666	.0653	.0578	.0515	.0200

DATE 09 OCT 75 TA-2F - PRESSURE SOURCE DATA TABULATION

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A098)

MACH (2) = 4.960 ALPHA (1) = 20.490

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
225.000	.4331	.2405	.1233	.0527	.0439	.0452	.0288	.0364	.0389	.0250	.0137	.0149
247.500		.1270	.0578	.0288	.0200	.0338	.0149	.0250	.0225	.0149	.0124	.0275
270.000	.1837	.0715	.0401	.0212	9.9990	.0262	.0161	.0275	.0237	.0111	.0137	.0225
292.500		.0477	.0301	.0162	.0364	.0275	.0149	.0250	.0250	.0149	.0137	.0225
315.000	.1157	.0427	.0187	.0149	.0238	.0275	.0137	.0225	.0162	.0112	.0162	.0187
326.000									.0137	.0149	.0149	.0175
346.000		.0616	.0275	.0162	.0149	.0250	.0099	.0187	.0162	.0099	.0112	.0212
360.000	.1862	.1046	.0894	.0794	.0857	.1008	.0655	.0768	.0794	.0730	.0149	.0086

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A099) (16 NOV 74)

REFERENCE DATA

SREF = 572.5550 SQ. FT XMRP = 1086.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 24.660 BETA = .00000 Q(PSI) = 6.8620 PO = 60.017 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1475	.0207	-.0271	-.0463	-.0429	-.0412	-.0553	-.0452	-.0350	-.0164	-.0024	-.0734
14.000		.0427	-.0283	-.0486	-.0536	-.0531	-.0593	-.0508	-.0401	-.0322	.0581	-.0813
24.000									-.0488	-.0390	-.0396	-.0824
45.000	.4056	.1920	.0578	-.0136	-.0300	.0229	.0127	.0082	.0158	.0313	.0409	-.0830
67.500		.3853	.1961	.0655	.0419	.0317	.0193	.0199	.0250	.0323	.0437	-.0807
90.000	.9608	.6198	.3666	.1740	9.9990	.1272	.1294	.1266	.1283	.1300	.1621	-.0627
112.500		.8132	.5085	.2760	.2506	.2269	.2213	.2326	.2331	.2337	.3132	-.0582
135.000	1.2982	.9073	.5758	.3149	.2867	.2749	.2687	.2749	9.9990	.2788	.2782	-.0255
157.500		.8205	.5189	.2861	.2546	.2416	.2343	.2438	.2591	.2416	.2399	-.0396
180.000	.9676	.6209	.3814	.1909	.1638	.1520	.1407	.1446	.1480	.1407	.1345	-.0537
202.500		.4175	.2190	.0832	.0573	.0398	.0336	.0370	.0353	.0319	.0274	-.0655
225.000	.4242	.2219	.0900	.0009	-.0193	-.0311	-.0424	-.0396	-.0413	-.0458	-.0514	-.0661
247.500		.0838	-.0012	-.0508	-.0621	-.0649	-.0734	-.0694	-.0649	-.0661	-.0700	-.0627
270.000	.1238	.0111	-.0446	-.0711	9.9990	-.0666	-.0734	-.0694	-.0655	-.0672	-.0666	-.0627
292.500		-.0142	-.0565	-.0745	-.0531	-.0700	-.0740	-.0700	-.0666	-.0678	-.0632	-.0694
315.000	.0787	-.0091	-.0537	-.0723	-.0649	-.0559	-.0683	-.0699	-.0666	-.0689	-.0441	-.0683
326.000									-.0469	-.0373	-.0390	-.0717
346.000		.0212	-.0334	-.0661	-.0644	-.0644	-.0734	-.0717	-.0458	-.0289	-.0058	-.0706
360.000	.1475	.0207	-.0271	-.0463	-.0429	-.0412	-.0553	-.0452	-.0350	-.0164	-.0024	-.0734

MACH (2) = 4.960 ALPHA (1) = 24.510 BETA = .00000 Q(PSI) = 3.0700 PO = 90.021 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1624	.0918	.0779	.0691	.0704	.0931	.0578	.0679	.0704	.0665	.0124	.0086
14.000		.1007	.0641	.0641	.0540	.0704	.0490	.0528	.0578	.0591	.0792	.0074
24.000									.0124	.0893	.0275	.0061
45.000	.4194	.2140	.1094	.0704	.0603	.0868	.0691	.0704	.0817	.0817	.0792	.0049
67.500		.3978	.2127	.1056	.0829	.0905	.0804	.0792	.0905	.0829	.1031	.0074
90.000	.9687	.6298	.3627	.1913	9.9990	.1811	.1573	.1624	.1750	.1737	.2090	.0162
112.500		.8288	.5113	.2858	.2531	.2594	.2505	.2657	.2795	.2770	.3602	.0225
135.000	1.3252	.9233	.5819	.3211	.2846	.3009	.2972	.3135	9.9990	.3211	.3198	.0376
157.500		.8444	.5343	.2999	.2608	.2696	.2658	.2835	.3856	.2860	.2820	.0313
180.000	.9888	.6361	.3979	.2115	.1762	.1800	.1712	.1813	.1984	.1800	.1775	.0225
202.500		.4320	.2493	.1183	.0956	.0943	.0792	.0880	.0931	.0855	.0754	.0149

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A099)

MACH (2) = 4.960 ALPHA (1) = 24.510

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8800	.9020	.9230	.9540
THETA												
225.000	.4289	.2417	.1220	.0540	.0414	.0477	.0326	.0351	.0401	.0263	.0212	.0124
247.500		.1170	.0565	.0288	.0225	.0376	.0200	.0238	.0238	.0162	.0099	.0238
270.000	.1384	.0590	.0313	.0137	9.9990	.0238	.0124	.0212	.0238	.0137	.0074	.0238
292.500		.0389	.0212	.0137	.0263	.0250	.0175	.0200	.0212	.0124	.0099	.0250
315.000	.0842	.0376	.0162	.0137	.0162	.0275	.0124	.0175	.0162	.0124	.0137	.0338
326.000									.0112	.0149	.0124	.0275
346.000		.0578	.0250	.0137	.0137	.0250	.0124	.0149	.0187	.0099	.0112	.0225
360.000	.1624	.0918	.0779	.0691	.0704	.0931	.0578	.0679	.0704	.0666	.0124	.0086

MSFC 998 (TA-2F) MCR0200 EXTERNAL TANK, TI (RIA100) (16 NOV 74)

REFERENCE DATA

SREF = 872.5550 SQ. FT XMRP = 1088.4000 IN. XT
LREF = 324.0000 INCHES YMRP = .0000 IN. YT
BREF = 324.0000 INCHES ZMRP = 400.0000 IN. ZT
SCALE = .0030

PARAMETRIC DATA

BETA = .000 OFFSET = 20.000
MOUNT = 1.000 PHI = 315.000

MACH (1) = 3.480 ALPHA (1) = 28.700 BETA = .00000 Q(PSI) = 6.8640 PO = 60.035 P = .81000

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1209	.0048	-.0362	-.0508	-.0487	-.0418	-.0570	-.0514	-.0418	-.0300	-.0435	-.0785
14.000		.0189	-.0388	-.0526	-.0593	-.0631	-.0693	-.0565	-.0482	-.0447	.0386	-.0830
24.000									-.0827	-.0565	-.0570	-.0847
45.000	.3727	.1806	.0561	-.0137	-.0283	.0330	.0262	.0223	.0347	.0561	.0868	-.0830
67.500		.4015	.2127	.0809	.0555	.0527	.0431	.0426	.0476	.0600	.0640	-.0798
90.000	1.0166	.6829	.4141	.2179	9.9990	.1745	.1802	.1807	.1835	.1864	.2223	-.0559
112.500		.9202	.6046	.3521	.3273	.3132	.3087	.3211	.3205	.3205	.4229	-.0481
135.000	1.4111	1.0348	.6922	.4037	.3767	.3750	.3739	.3772	0.9990	.3784	.3800	-.0075
157.500		.9254	.6212	.3626	.3333	.3282	.3248	.3344	.3462	.3293	.3295	-.0255
180.000	1.0252	.6837	.4409	.2375	.2099	.2054	.1998	.1998	.2043	.1969	.1919	-.0441
202.500		.4364	.2454	.1040	.0784	.0690	.0589	.0623	.0651	.0572	.0561	-.0638
225.000	.3983	.2121	.0904	.0026	-.0159	-.0266	-.0357	-.0362	-.0351	-.0396	-.0402	-.0740
247.500		.0628	-.0092	-.0554	-.0661	-.0661	-.0734	-.0706	-.0650	-.0661	-.0695	-.0672
270.000	.0768	-.0143	-.0548	-.0768	9.9990	-.0683	-.0751	-.0700	-.0655	-.0667	-.0661	-.0717
292.500		-.0351	-.0650	-.0802	-.0588	-.0689	-.0745	-.0706	-.0672	-.0683	-.0610	-.0745
315.000	.0442	-.0266	-.0621	-.0773	-.0728	-.0627	-.0745	-.0723	-.0711	-.0678	-.0447	-.0762
326.000									-.0632	-.0582	-.0419	-.0774
346.000		.0042	-.0452	-.0734	-.0717	-.0700	-.0768	-.0757	-.0571	-.0351	-.0289	-.0785
360.000	.1209	.0049	-.0382	-.0508	-.0497	-.0418	-.0570	-.0514	-.0418	-.0300	-.0435	-.0785

MACH (2) = 4.660 ALPHA (1) = 28.640 BETA = .00000 Q(PSI) = 3.0700 PO = 90.009 P = .17800

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.9230	.9540
THETA												
.000	.1422	.0882	.0832	.0718	.0731	.0895	.0617	.0668	.0680	.0643	.0149	.0086
14.000		.0907	.0629	.0642	.0503	.0718	.0516	.0503	.0541	.0579	.0880	.0099
24.000									.0137	.0175	.0313	.0086
45.000	.3979	.2103	.1107	.0729	.0641	.0931	.0792	.0767	.0906	.0981	.0931	.0036
67.500		.4208	.2342	.1183	.0956	.1044	.0956	.0918	.1044	.1019	.1208	.0074
90.000	1.0430	.6980	.4233	.2317	9.9990	.2027	.2090	.2116	.2242	.2267	.2669	.0212
112.500		.9347	.6071	.3551	.3224	.3476	.3413	.3551	.3639	.3627	.4685	.0288
135.000	1.4386	1.0417	.6852	.4055	.3665	.4093	.4055	.4181	9.9990	.4231	.4282	.0565
157.500		.9397	.6197	.3677	.3274	.3602	.3602	.3702	.4534	.3715	.3702	.0452
180.000	1.0165	.6928	.4934	.2843	.2216	.2392	.2291	.2367	.2493	.2405	.2318	.0250
202.500		.4458	.2892	.1348	.1107	.1183	.0894	.1094	.1145	.1107	.1018	.0162

MSFC 596 (TA-2F) MCR0200 EXTERNAL TANK, T1 (R1A100)

MACH (2) = 4.960 ALPHA (1) = 28.540

SECTION (1)ANK DEPENDENT VARIABLE CP

X/LB	.0550	.1080	.1620	.2160	.3220	.5180	.6100	.7350	.8600	.8920	.8230	.9540
THETA												
225.000	.3992	.2342	.1246	.0578	.0477	.0578	.0364	.0401	.0427	.0364	.0263	.0099
247.500		.1031	.0565	.0301	.0263	.0326	.0212	.0238	.0212	.0187	.0124	.0250
270.000	.1069	.0490	.0326	.0162	9.9990	.0250	.0137	.0225	.0225	.0124	.0149	.0225
292.500		.0326	.0250	.0175	.0288	.0313	.0200	.0212	.0212	.0124	.0137	.0275
315.000	.0666	.0351	.0175	.0162	.0200	.0301	.0162	.0200	.0162	.0137	.0112	.0212
326.000									.0137	.0124	.0099	.0200
346.000		.0515	.0263	.0149	.0149	.0225	.0162	.0137	.0175	.0061	.0049	.0250
360.000	.1422	.0882	.0832	.0718	.0731	.0895	.0617	.0668	.0680	.0643	.0149	.0086